IN THE

United States Circuit Court of Appeals

FOR THE NINTH CIRCUIT

October Term, 1913.

SHERMAN CLAY & COMPANY,
Plaintiff in Error,

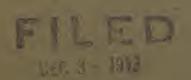
vs.

SEARCHLIGHT HORN COMPANY,
Defendant in Error.

Reply Brief for Defendant in Error.

JOHN H. MILLER, WM. K. WHITE, For Defendant in Error.

THE JAMES H. BARRY COMPANY SAN FRANCISCO





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vs.

SEARCHLIGHT HORN COMPANY,

Defendant in Error.

REPLY BRIEF OF DEFENDANT IN ERROR TO BRIEF ON BEHALF OF PLAINTIFF IN ERROR.

PRELIMINARY MATTERS.

Plaintiff in error did not file any brief, as required by the rules of this court, prior to the oral argument; but we stipulated that such a brief might be filed after the oral argument, and the same has now been filed.

The said brief shows a misconception of the rules of appellate practice in that it puts the case on a footing with an appeal from a final decree in an equity case, discussing in detail all the questions which are concerned with the prior art, invention, anticipation, equivalency, infringement, etc., without regard to specific assignments of error. Counsel loses sight of the fact that this is an action at law, brought to this court by writ of error, and that it is not proper for him to argue anything other than errors of law duly covered by exceptions appearing on a bill of exceptions and supported by an assignment of errors.

In a very recent case of New York C. & H. R. Co. vs. Henney, 207 Fed. Rep., 79, the same practice was attempted by the plaintiff in error, but met with a deserved rebuke by the court of appeals of the Second Circuit.

There are one or two matters contained in the first ten pages of plaintiff in error's brief, designated by him as "Foreword," which we desire to notice, not because they are of much materiality, but because they are continually referred to and repeated over and over again throughout the brief.

On page 2 it is stated that the infringing horns were bought by Sherman Clay & Co. from the Victor Talking Machine Company, and it is insisted that the suit should have been brought against the Victor Talking Machine Company in New Jersey, and that it was wrongful to bring the suit at San Francisco against Sherman Clay & Company. How this matter could have any bearing on the issues involved passes our comprehension, and heretofore we have paid no attention to it; but in order to satisfy our cavilling

opponent, we venture to suggest the following: The attorney whom the Searchlight Horn employed to prosecute its suits on this patent happened to reside in San Francisco. He could have brought suit in any State of the Union, since the Victor horns are sold in every State; but naturally he would prefer to bring it where it would be most convenient to himself and least expensive to his client. In looking over the ground he found that Sherman Clay & Company were selling the infringing horns at San Francisco, his place of abode, and he brought the suit there. Had he selected the Victor Talking Machine Co. as the defendant, he would have been compelled to go to New Jersey and try the case in that State. That would have caused inconvenience to himself and unusual and burdensome costs to his clients. To avoid this, he brought suit against Sherman Clay & Co. in San Francisco where he resided and where his client would be subjected to the least expense. It would seem from counsel's argument that the Victor Talking Machine Co. is the real defendant in this case and is defending the same. Assuming that to be true, the question is simply this, Should a patent owner bring his suit at the place which is least expensive to the defendant and most expensive to himself, or should he bring it at the place which is least expensive to himself regardless of how it may operate on the defendant? Such was the situation with which the Searchlight Horn Co.'s attorney was confronted, and acting according to his best judgment and for the best interests of his client, he filed a suit at San Francisco against Sherman Clay & Co., where the inconvenience to himself and the expense to his client would be least. We trust that this explanation will put an end to the continual complaints made by our opponents in this matter. As already stated, it has nothing to do with the merits of this case and we refer to it merely for the purpose of placing ourselves on record personally as being free from any just criticism in the matter.

At pages 2, et seq., of the "Foreword," it is stated that the Standard Metal Mfg. Co. of New Jersey, manufactured the infringing horns; that said Company was a licensed manufacturer; that Sherman Clay & Co. purchased the infringing horns from the Victor Talking Machine Co., which company in turn had purchased them from the Standard Metal Mfg. Co. From this it is argued that no infringement was shown. This matter will be taken care of later on in our brief. We pause at this point just long enough to challenge the truth of the alleged facts so stated, and we shall hereafter refer to the record in support thereof.

At pages 5, et seq., of the "Foreword," it is asserted that plaintiff's exhibits 14 and 15, which represented the infringing horns, are not shown by the evidence to have been sold by Sherman Clay & Co. and that there is no evidence that these horns were sold by plaintiff prior to May, 1908, and that, therefore, there is no evidence of infringement, for which reason

it is urged the court below manifestly erred in not instructing the jury on that ground to find for the defendant. This matter also will be taken care of later on. We merely desire now to challenge its correctness, and we do so at this time merely because it appears in the first part of the brief of plaintiff in error.

At pages 6, et seq., of the "Foreword," it is urged that there was no patentable invention in Nielsen's patent; that he was limited to the outwardly directed flanges; that the Court erred in instructing the jury regarding extensive use; also erred in its interpretation of the patent, also in its interpretation of the law relevant to patents, and in refusing to admit evidence, as well as in refusing to instruct the jury on certain points. Indeed the errors charged are so multitudinous that one marvels greatly how so many could have occurred in so small a case. We take issue with counsel on all of these positions and shall hereafter argue them more in detail.

At page 8 of the "Foreword," the Villy reissue patent, which was excluded from evidence because it is a subsequent patent and could not therefore affect the Nielsen patent, is treated of, and it is there asserted that seven additional and broader claims were inserted in such reissue. A reference is even made to the record of another case (Appeal Case, No. 2307) for evidence in reference to this Villy reissue. And, finally, it is claimed that the lower Court was misled.

How this Villy reissue patent or any other patent subsequent in date to the patent in suit could have any bearing on the issues involved remains one of those mysteries which has not yet been satisfactorily explained. The original Villy patent, which was prior in date to Nielsen, was put in evidence without objection from us, and received such consideration at the hands of the Court and jury as it was entitled to. More than two years after the date of Nielsen's patent said original Villy patent was surrendered and reissued, the only change being the addition of new claims, we are told. We submit that there was no error in excluding from evidence the Villy reissue patent for the reason that it was subsequent to Nielsen's. But even if it had been admitted in evidence, plaintiff in error could not have derived any benefit therefrom which it had not already derived from the original Villy patent which was in evidence, for counsel tells us that the two patents were exactly the same except for the addition of seven new claims in the reissue. This matter likewise will be treated more in detail later on.

REPLY IN DETAIL.

There are one or two preliminary matters which we desire to note before proceeding with a detailed answer.

In the first place, the learned counsel makes many statements of fact not contained in the record and even goes so far as to refer to and rely on portions of the records in the other two cases now before this court, viz.: the equity case, No. 2307, against Sherman Clay & Company, and the case, No. 2314, against the Pacific Phonograph Co. Manifestly this is improper. Each case in an appellate court must be determined on its own record, the province of the court being to determine whether or not upon that record any error was committed by the lower court. The other two cases referred to were brought subsequently to the trial of the case at bar, and were not in existence at the time of the trial. The present case, No. 2306, must be decided on its own record without reference to or assistance from the records in the subsequent cases.

In the next place we must call the attention of the court to the insufficiency of the bill of exceptions in the case at bar. Said bill does not contain any of the prior patents relied on as showing the state of the art. These patents are not made a part of the bill of exceptions, either by physical incorporation therein or by appropriate reference. The bill merely shows that certain patents, designated by dates and numbers, were offered in evidence. Not even is the patent sued on made a part of the bill. At page 28 it is recited that plaintiff offered in evidence the patent in suit, and that the same was marked "Plaintiff's Exhibit A".

When the defendant below offered its testimony a similar course was pursued. At pages 126-7, certain prior patents were stated to have been offered in evi-

dence, and were asked to be marked as "Defendant's Exhibits," but it is not even stated that they were received in evidence or that they were so marked. Counsel merely stated that he offered them in evidence and asked that they be marked. Nor is there any attempt shown to make them a part of the bill of exceptions by appropriate reference. Whether or not a document can be made a part of a bill of exceptions by reference we shall not stop to inquire, though we doubt it. There is no attempt here to make these patents a part of the bill by reference. What the counsel for plaintiff in error did was to procure from the judge of the lower court an order allowing all exhibits filed by the plaintiff and the defendant to be withdrawn from the files for the purpose of being transmitted to this court (Record 343). In accordance with that order, he has withdrawn from the files of the lower court the aforesaid exhibits, or what purports to be said exhibits, and has filed them with the clerk of this court and caused them to be printed in a volume which he has entitled "Book of Exhibits." This is not proper practice and is not sufficient to make the said exhibits a part of the bill of exceptions, so that they can be considered by this court.

In the case of Reid vs. Gardner, 17 Wall., 411, the Supreme Court said:

"It has been frequently held by this court that in passing on the questions presented by the bill of exceptions it will not look beyond the bill itself. The pleadings and the statements of the bill, the verdict and the judgment, are the only matters that are properly before the court. Depositions, exhibits, or certificates not contained in the bill can not be considered."

The precise point was passed on by this court in the recent case of Arizona & N. M. Co. vs. Clark (207 Fed., 821), where many cases are cited in support of the rule.

In view of this rule the prior patents brought here by plaintiff in error and embodied in his so-called "Book of Exhibits" cannot be considered by the court, because they are not properly before the court. If this is correct, it will dispose of very nearly all the assignments of error relied on for a reversal.

ASSIGNMENT OF ERROR III (Record 309).

"The said court erred in refusing to admit in evidence on behalf of the defendant United States reissue letters patent No. 12,442, granted G. H. Villy, January 30, 1906, for improvement in horns for phonographs, ear-trumpets, etc., the same being a re-issue of United States Letters patent No. 739,954, granted G. H. Villy, under date of Sep-

tember 29, 1903, and being Defendant's Exhibit 'O'."

This assignment of error is of no avail, because the re-issue patent referred to does not appear in the bill of exceptions, or, for that matter, in any other part of the record. A copy of it was not incorporated in the bill of exceptions, nor was it attempted to be made a part thereof by reference. The proceedings had in this matter will be found at page 128 of the record, from which it appears that the re-issue patent was offered in evidence by defendant's counsel, but was rejected. That is all that the bill of exceptions discloses on the subject. When error is alleged to the rejection of a document from evidence, it is essential that the document or a copy thereof be incorporated in the bill of exceptions so that the appellate court may ascertain whether the ruling of the lower court was correct or not.

In Reed vs. Gardner, 17 Wall., 409 (411), the Supreme Court said:

"It has been frequently held by this court, that in passing upon the questions presented in a bill of exceptions, it will not look beyond the bill itself. The pleadings and the statements of the bill, the verdict, and the judgment, are the only matters that are properly before the court. Depositions, exhibits, or certificates not contained in the bill, cannot be considered by the court."

This case was referred to and approved by the su-

preme court in Hornbuckle vs. Stafford, 111 U. S., 393, also by the court of appeals of the 4th Circuit, in S. W. Virginia Improvement Co. vs. Frari, 58 Fed. Rep., 171.

The subject was also considered and passed on in Newport News and Old Point R. Co. vs. Yount, 136 Fed., 590, and has been recently decided by this court in Arizona & N. M. R. R. vs. Clark (207 Fed., 821) upon the authority of Russell vs. Ely (2 Black., 580) and U. S. vs. Copper Queen (185 U. S., 497). Other cases could be cited to the same effect, but the rule is an elementary one and perhaps does not need the citation of any authorities at all.

Not only does the said re-issue patent not appear in the bill of exceptions, but it does not appear in any other portion of the record, nor is it physically before this court at all. At the bottom of page 343 of the record, it appears that the lower court made an order that all exhibits filed by the plaintiff and the defendant might be withdrawn for the purpose of being transmitted to this court. This is not a proper way to make said exhibits or any of them a part of the bill of exceptions or the record. Yet even under this order the Villy re-issue patent has not been brought here, nor can it be brought here under said order, for the reason that it never was an exhibit in the case below.

Counsel for plaintiff in error makes various statements in his brief regarding the contents of this Villy re-issue, but those are the statements of counsel unsupported by anything in the record. There is no Villy re-issue, nor a copy thereof, before this court, or available for consideration by this court under any proper rule of practice. The situation is simply this: plaintiff in error claims that the lower court erred in rejecting from evidence a named written document, but the said document has not been made a part of the bill of exceptions nor a part of the record in any other way so that this court can examine the same and see whether there was error in rejecting it. We insist, therefore, that for this reason alone assignment of error III is of no avail and must be disregarded.

But even if the Villy re-issue patent had been embodied in the bill of exceptions or was open for consideration by this court, there would not appear to be any error in having rejected it from evidence.

The ruling of the court on this point is at page 128 of the record, from which it appears that the defendant below offered in evidence a document stated to be the Villy re-issue patent, No. 12,442, dated January 30, 1906. Thereupon objection was made on the ground that said re-issue was not prior to the patent in suit (said patent in suit being dated October 4, 1904), and for that reason could have no effect in construing the Nielsen patent. The following colloquy then occurred between court and counsel:

"THE COURT—I do not see the competency of it for any purpose.

"MR. ACKER-We are entitled to the benefit

of all that in that re-issue of the patent.

"THE COURT—But that is a re-issue of the patent subsequent in date to the patent in suit. I will sustain the objection."

It will be seen from the foregoing that not even the learned counsel for the defendant below could advance any reason for offering the re-issue patent other than the general statement that he was entitled to the benefit of all that was in it. The court practically invited him to point out wherein it was relevant, and upon his failure to do so the objection was sustained, and the patent ruled out. Now, at this late day, after the case has gotten to the Court of Appeals, counsel undertakes to point out for the first time several reasons why this Villy re-issue patent was competent.

The first reason advanced by him (page 27 of the brief) is the assertion that a certain horn manufactured by the plaintiff, Defendant's Exhibit T, was marked by the plaintiff with this Villy re-issue patent as well as with the Nielsen patent, and that the Villy re-issue patent was the connecting link between said horn made under the re-issue and the original Villy patent.

The facts in regard to this matter are as follows: On cross-examination of our witnesses defendant below produced this exhibit T, and the evidence shows that horns of that style were at one time placed on the market by the Searchlight Horn Company. Opposite page 63 of defendant's brief is a photograph of Exhibit T in its expanded form, but it will be necessary to examine the exhibit itself in order to note its mode of construction. It is a horn made of metal strips attached together at their longitudinal edges by a hinged joint, like that of a common door, so that two adjoining strips will fold upon each other, and in this way the horn can be collapsed and folded into a small compact mass and put in a box when not in use. When needed for use, the horn is taken from the box and expanded in the form shown. This horn embodies some features of the Villy patent, but differs therefrom in that the strips are made of metal and have a hinged metal joint. Counsel now gives as his first reason for the alleged error of the court in not allowing the Villy re-issue patent to be put in evidence the assertion that exhibit T "was marked by the plaintiff with this Villy re-issue patent as well as with the Nielsen patent." The actual marking appearing on this exhibit T is as follows: "Searchlight Horn, U. S. pat. Oct. 4, 1904. Jan. 30, 1906. Searchlight Horn Co., Brooklyn, N. Y." Such marking is wholly immaterial to any issue in this case. It is frequently the custom of manufacturers to mark on their articles the numbers of all the patents they own, whether the article be actually covered or not. Such marking is nothing more than the assertion of an opinion on the part of the manufacturer that the

article is so covered, and that opinion may be or may not be correct. It is not material in this case whether exhibit T is protected by the patent or not. That is not the proper way to ascertain the scope of the patent. The court is to determine the scope of the patent by the evidence, and the mere fact that a device is marked by a patent number is not controlling, nor is it a fact of any great materiality. The first reason given by counsel seems to us to be without merit.

The second reason given is that it was important under the circumstances to know wherein the re-issue patent differed from the original as to the claims. This reason embodies a misconception of the law. It was not important, nor was it even material, to know wherein the claims of the Villy re-issue patent differed from the claims of the original. Neither the court nor the jury had anything to do with the claims of the Villy patent. Anticipating patents are effective only for the purpose of showing by their drawings and description the device therein disclosed. It is wholly immaterial what the claims of an anticipating patent are.

The third reason given by counsel is the assertion that plaintiff put out circulars to the trade, dated November 15, 1906, notifying the manufacturers that they were infringing upon the Villy re-issue patent and the said Nielsen patent (Brief, p. 27). In support of this assertion he refers to the record in the

Equity Case, No. 2307. He does not pretend that there is any such evidence in the case at bar or that any such evidence was produced. The matter, therefore, cannot be considered in this case, even if it were of any materiality, because there is no evidence on the subject in this case. Each case must be tried on its own record, and what this court is now called on to do is to ascertain if any error was committed by the lower court in respect of the evidence that was actually introduced therein at the trial. Yet the learned counsel gravely asks this court to reverse the judgment in this case No. 2306 because in another case brought subsequently, certain evidence appears which was not in the case at bar, and he asks the court to go out of this record in case No. 2306 and take up the evidence appearing in the other case, No. 2307, and by giving such effect to such evidence then to reverse this case, No. 2306.

The next reason advanced by counsel (Brief, p. 28) is that the Villy re-issue was important for the reason that the United States Horn Co., the predecessor of the Searchlight Horn Co., first started to make a horn with ribs having outwardly directed flanges, but shortly thereafter gave up that form of construction and adopted the lock seam, and shortly thereafter applied for a re-issue of the Villy patent in order to secure broader claims which did not include the collapsible feature of the Villy horn. How this could affect the case passes our comprehension. The Searchlight Horn

Co. is not chargeable with a secret motive which influenced the United States Horn Co. in applying for a re-issue of the Villy patent. But furthermore, it is wholly immaterial what those motives were, even if the Searchlight Horn Co. were bound thereby. After having purchased the original Villy patent, the United States Horn Co. concluded that broader claims should have been allowed therein which would give better protection to the Villy horn, and thereupon said Company obtained a re-issue. The United States Horn Company cannot be criticised for so doing. A manufacturer always desires to secure as full protection as possible and if a patent is not broad enough to protect him, he has a right to apply for a re-issue. Manifestly, to our mind, this last reason advanced by counsel is of no moment in this case.

At pages 59-60 and 101-2, counsel returns to the subject and again rehashes the same old arguments which he had advanced at page 27 and which we have just been considering, and he again argues that the Villy re-issue was important because the plaintiff marked defendant's Exhibit T with the number of the Villy re-issue patent as well as with that of the Nielsen patent. We have already pointed out that such marking is merely in accordance with the usual custom of manufacturers to place on their products the numbers of all the patents they own, and it merely constitutes an assertion on their part that in their opin-

ion the article is covered by said patents. That opinion may be correct or it may be incorrect, and if it be a material point, it is for the court to sav whether the article is so covered. Certainly, no estoppel arises against the manufacturer, for every person is allowed to correct a mistake if he discovers that one has been made. But it is wholly immaterial whether Exhibit T be covered by both the patents (Nielsen and Villy re-issue) or not. That question relates solely to the claims of those patents and the construction that the court will give to those claims, and the claims of the Villy re-issue or even the Villy original, are not material in this controversy. And after all, what benefit could defendant below have derived if the Villy reissue patent had been allowed in evidence? The court certainly would have instructed the jury that they had nothing to do with the claims of said re-issue patent, and yet counsel now says that these claims were allimportant. Is it conceivable that the result would have been different if the re-issue patent had been allowed in evidence? Would not the jury have been told by the court that the Villy re-issue patent could not operate as an anticipation because it was more than two years subsequent to the date of the Nielsen patent? And if the jury had been so told, would they not have wholly disregarded it as an anticipation? We see no escape from the conclusion. The original Villy patent was put in evidence for the purposes of anticipation because it was prior in date

to Nielsen. Defendant below was entitled to whatever the said original patent showed. Counsel informs us that the re-issue patent was the same as the original as to drawings and specification and differed only from the original in the addition of seven new claims. Now, as the jury had nothing to do with the seven new claims of the re-issue and as said seven new claims were of no materiality in this controversy, it is clear that the jury got from the Villy original patent all that it would have gotten from the re-issue patent. The objections now urged in this court for the first time against the ruling of the lower court were not urged in the lower court. In fact when the Villy re-issue was offered in the lower court no specific reason for its admissibility was pointed out, notwithstanding the fact that the court invited counsel to point out wherein the re-issue was relevant, competent or material (Record, page 128). The objections now urged in this court for the first time in the case appear to us to be an afterthought.

But in no event can this assignment of error be held good because the Villy re-issue was subsequent in date by nearly two years to the date of Nielsen's patent, and also because the document is no part of the record on appeal. It is not even physically present in this court.

ASSIGNMENT OF ERROR IV (Record 309).

This relates to refusal of the court to allow the expert witness, Mr. W. H. Smyth, to answer a certain question, which, in the opinion of the lower court, amounted to a question of law regarding the construction of plaintiff's patent. The matter is treated of by us in our opening brief, beginning on page 19 and ending on page 21, to which we respectfully refer the court without further comment.

ASSIGNMENT OF ERROR V (Record 310).

This alleged error relates to the refusal of the lower court to instruct the jury to render a verdict for the defendant. It is treated of by opposing counsel on pages 30 and 103 of his brief.

This assignment of error is of no avail, because the bill of exceptions fails to state or show that it contains all the evidence produced at the trial. A motion for such an instruction is necessarily based on all the evidence in the case, and in order that it may be available in the appellate court, the bill of exceptions must show that it contains all of said evidence. This precise question arose in the case of Atchison vs. Myers (63 Fed. Rep., 796), where a similar motion was first made by the defendant at the close of the plaintiff's evidence and was denied, and where the motion was afterwards renewed at the close of all the evidence in the case. There the court said:

"And, if the plaintiff in error had elected to stand upon the ruling of the court in refusing to instruct the jury to return a verdict in its favor, no available error would be presented, because the bill of exceptions does not affirmatively show that the evidence embodied in the record is all the evidence that the plaintiff had introduced at the close of his opening of the case. If the alleged error was otherwise available, it could not be considered by us, unless it is made to appear that the entire evidence which had been introduced by the plaintiff at the close of his opening of the case was brought here by a proper bill of exceptions. No principle of law and no rule of court requires the entire evidence to be embodied in a bill of exceptions, and hence the presumption is that the bill of exceptions does not contain all the evidence before the court at the time the motion was made. To overcome this presumption the bill of exceptions should contain a statement, at the close of plaintiff's evidence in opening, to the effect that the above and foregoing is all the evidence given by the plaintiff at the time the motion was made.

"At the close of the evidence the plaintiff in error asked the court to give a binding instruction to the jury to return a verdict in its favor. The defendant in error insists that this alleged error is waived because the plaintiff in error asked the court to give a number of instructions upon other points upon which it relied for defense, and took its chances of securing a favorable verdict from the jury. It is not necessary to determine whether or not a prayer for a binding instruction is waived by the defendant for the reasons above stated, and we decline to express any opinion on the question. The assignment is unavailing, for the reason that the bill of exceptions before us does not affirmatively show that it contains all the evidence given

on the trial of the cause, and without that we can not say the court erred in its ruling."

The matter was affirmatively settled by the Supreme Court in the case of United States vs. Copper Queen Mining Co. (185 U. S., 497), where the following emphatic language is used:

"The motion on the part of the Government at the close of the evidence to direct a verdict for the Government upon all the evidence, and the exception to the refusal of the court so to do, would raise the question whether there was any evidence of the citizenship of Ross and of his residence in the Territory when the cutting was done, upon which to base a verdict, were it not that the bill of exceptions lacks an essential state-

ment for that purpose.

"It does not appear from the bill that it contains all the evidence given upon the trial. It may be that it does, but we cannot, in the absence of any statement in the bill to that effect, presume it does, for the purpose of reversing the judgment herein, upon the assumption that the proper construction of the act of Congress requires such citizenship as well as residence. When this court is asked to reverse a judgment entered upon a verdict of a jusy, upon a writ of error, upon the ground that there is absolutely no evidence to sustain it, and the court should have directed a verdict, the bill of exceptions must embody a statement or there must be a stipulation of counsel declaring that the bill contains all the evidence given upon the trial so that the record shall affirmatively show the fact Russell vs. Eln : Black, 171, 180. In the cited case the court, after remarking that the bill of exceptions did not outport to give all that a cer-

tain witness had testified to, said that according to a well-known rule the court under such a condition of the record was bound to presume that there was that in the witness's testimony which justified the instruction. It was then added by the court: 'What purports to be the entire deposition of Baker is sent up by the Clerk of the District Court, and is printed in the record before us, and if properly before us might sustain the exception. But this deposition is not incorporated into the bill of exceptions, nor so referred to in it as to be made a part of the record of the case. It is only a useless encumbrance of the transcript, and an expense to the litigating parties.' The court thus refused to look at the deposition which purported to be the entire deposition of the witness because it was not made a part of the bill of exceptions.

"In this case there is nothing whatever in the bill of exceptions to show that the evidence contained therein is all the evidence that was given on the trial, and we cannot presume, for the purpose of reversing the judgment, that there was no evidence given upon which the jury might rightfully have found the verdict which they did.

"So, in Texas & Pacific Railroad Co. vs. Cox, 145 U. S., 593, 606, which was an action to recover damages against the company for the death of plaintiff's husband, resulting from the negligence of the company, it was remarked, in regard to the evidence in the case, that 'The bill of exceptions does not purport to contain all the evidence, and it would be improper to hold that the court should have directed a verdict for defendant for want of that which may have existed.'"

Under the above decisions, it is manifest that assignment of error V is not available to plaintiff in

error because the bill of exceptions does not affirmatively show that it contains all the evidence produced at the trial and upon which evidence the motion was based.

At page 30, opposing counsel says that this objection is captious. We can merely reply that whether it be captious or not, it is the ruling both of the Supreme Court of the United States and of this court.

Counsel further asserts, at page 30, that the defect is cured by the certificates appearing at pages 344 and 347 of the record. The first of said certificates is that of the clerk of the lower court to the effect that the record sent up by him to this court is "a full, true" and correct copy of the record and proceedings in "the above and therein entitled cause, as the same "remains of record and on file in the office of the "clerk of said court, and that the same constitutes "the return to the annexed writ of error."

The second of said certificates is merely the return of the clerk of the lower court to the writ of error, and reads as follows:

"The record and all proceedings of the plaint whereof mention is within made, with all things touching the same, we certify under the seal of our said court, to the United States Circuit Court of Appeals for the Ninth Circuit, within mentioned at the day and place within contained, in a certain schedule to this writ annexed as within we are commanded."

The most casual reading of these two certificates will show that they have nothing to do with the particular question under discussion, which question is the absence from the bill of exceptions of any statement or other showing that it contains all the evidence produced at the trial.

ASSIGNMENTS VI, VII AND VIII (Record 310-312).

These assignments are not available because the matters referred to therein were not duly excepted to at the trial. The exception relied on is at page 282 of the record and reads as follows:

"At the conclusion of said charge the defendant excepted to that part of the charge upon the subject of sufficiency of invention."

Opposing counsel insists that this was in substance an exception to that part of the court's instruction "upon the subject of invention or the sufficiency of invention." But such is not the case. The exception was not "upon the subject of invention." This exception related to the question of what was or was not sufficient exercise of the inventive faculty. In other words, the defendant below had contended that the patent was void for want of invention and that the facts disclosed were not sufficient to support a conclusion that the inventive faculty had been exercised—the ordinary defense of want of invention. The court instructed the jury on that point against

the views advanced by the defendant below, and the exception "upon the subject of sufficiency of invention" was intended to reach that point and that point alone. Now, let us see what was actually involved in these assignments VI, VII and VIII.

ASSIGNMENT VI reads as follows:

"The horn is constructed of metal strips secured together at their longitudinal edges by a seam, which produces ribs on the outside of the horn. In the patent this seam is shown as being a flanged or butt seam, and these flanges extend outwardly thereby forming longitudinal ribs on the outside of the horn; the sheet metal strips are curved and flexed outwardly, but this curve is more abrupt adjacent to the outlet of the horn or the mouth or large end thereby producing a bell-shaped horn with a flaring outlet. This is the mechanical structure described in the specification, and after specifying the method of construction the patentee has added the following clause."

This portion of the charge is found at the bottom of page 271 and the top of page 272 of the record. It will be seen therefrom that it is nothing more than a statement to the jury of the mechanical structure described in the specification of the Nielsen patent. It does not purport to be a consideration of any claims of the patent, but is merely for the benefit of the jury in understanding the mechanical construction shown and described in the patent as an embodiment of the Nielsen invention. This portion of the charge did not relate to "the sufficiency of invention." It is not pre-

tended that the language used is incorrect in describing the physical structure of the device shown, and we cannot conceive how there could be any legal exception taken to it. Certainly the exception under consideration does not reach it.

ASSIGNMENT VII is along the same lines as the one already considered. It relates to that portion of the charge beginning near the middle of page 272 of the record and reads as follows:

"Now, the invention actually covered by the patent does not reside in the particular form of the seam which joins the metal strips together. If the same result produced by the flanged seam shown in the patent as joining the metal strips together is obtainable by any other usual form of seam known at the time of Nielsen's invention which operates in substantially the same way to produce the same result, then the substitution of such a seam would not be a departure from the invention, but would be within its real and true scope. The invention of Nielsen consists in the production of a horn for phonographs and similar instruments consisting of a combination of the various elements hereinabove described by me, and the essential characteristics of the Nielsen horn are the following:

"I. It must be composed of a multiplicity of metal strips secured together at their longitudinal

edges by a seam.

"2. This seam must be of such a construction as to produce longitudinal ribs on the outer surface of the horn.

"3. The strips are narrower in cross section at the inner end than at the outer end.

"4. The strips must curve outwardly from the inner to the outer end, but the curve is more abrupt

adjacent to the outer end.

"Now, combining these elements together in this way, Nielsen produced a horn for phonographs and similar machines larger at one end than the other and having substantially a bell shape and abruptly flaring outlet made up of longitudinally arranged metal strips secured together at their outer edges by a seam of such character as to produce longitudinal ribs on the outer surface."

This portion of the charge does not deal with the question of sufficiency of invention. It merely tells the jury what the invention is. In explanation of it the court added immediately afterwards that it was an explanation of the invention in colloquial language rather than in technical form. The question of sufficiency of invention, that is to say, what was necessary to support a finding of the inventive faculty, is treated of by the court at another part of the charge as a distinct and separate matter, beginning near the bottom of page 273 of the record and continuing on page 274.

ASSIGNMENT VIII.

This assignment relates to that portion of the court's charge beginning near the bottom of page 274 of the record regarding the effect of extensive use as controlling the question of invention if the case is otherwise in doubt. The portion of the charge given by

counsel in his brief at page 15, as well as his assignment of error VIII (page 312) does not correctly quote the language of the court in that it leaves out in the second line from the bottom after the word "purpose" the following words, viz.: "and will justify a jury in deciding that the patent involved invention." Why this language was left out, we do not know, and what effect its omission would have, we do not stop to inquire. We merely assert that the language used by the court on this subject embodies the true principles of law copied from the decision of this court in the case of Morton vs. Llewellyn (164 Fed., 693). We shall consider the matter later on more in detail in another portion of this brief.

And furthermore, these assignments VI, VII and VIII are of no avail because the bill of exceptions fails to state that it contains all the evidence adduced at the trial.

ASSIGNMENT OF ERROR IX (Record 312-13).

"If, therefore, you find that at the date of Nielsen's invention the lock seam was a mechanical equivalent to the flanged or butt seam in the sheet metal art, and that they both accomplished the same result in substantially the same manner as a seam and rib when used in phonograph horns, then you must find that the two things are mechanical equivalents and that the defendant is not relieved from the charge of infringement merely because its horns use the lock seam instead of the flanged or butt seam."

It would be difficult for any one to find error in this portion of the charge. Whether the invention was of a pioneer character or of a limited character it was entitled to the doctrine of equivalents and the court merely told the jury that if they found that the two seams accomplished the same result in substantially the same manner as a seam and rib when used in phonograph horns, then they should find that the two were mechanical equivalents, and that the defendant would not be relieved from the charge of infringement merely because its horns used the lock seam instead of the butt seam. This matter also we shall consider later on.

ASSIGNMENT OF ERROR X (Record 313).

"In view of the action of the patent office as disclosed in the file-wrapper and contents and the prior art as established by undisputed testimony, the plaintiff's patent necessarily belongs to a class which is very narrow, and the patentee is limited to the precise device or devices and combinations shown and claimed in his patent.

"The plaintiff's patent is in no sense a primary or pioneer patent. It evidently belongs to an old art which appears to have advanced step by step for many years as the demand of the trade required. If, therefore, you find from the evidence that the defendant has not made, used or sold a horn for phonographs of the precise description, construction and mode of operation disclosed in one or more of the claims mentioned in the patent, then you must find for the defendant."

This request seeks to limit the Nielsen claim to "the precise device" shown in the patent, that is to say, to the right angle flanges forming a butt seam. It deprives the patent of the doctrine of equivalents in any form, and the exception taken was that the Nielsen patent was not entitled "to the doctrine of equivalents at all" (Record 282). There is no such law as that. It is an elementary truth, that all patents are entitled to the doctrine of equivalents, whether the invention be broad or narrow, and the matter will be considered later on.

And furthermore, the request covered by assignment X is not in proper form in that it is argumentative and covers matters of fact concerning which the lower court said that it did not instruct. It certainly would not have been in proper form for the court to have told the jury that the plaintiff's patent "necessarily belongs to a class which is very narrow," nor to have told the jury that the patentee was "limited to the precise device or devices and combinations shown and claimed in his patent," nor to have told the jury that the plaintiff's patent was "in no sense a primary or pioneer patent"; nor to have told the jury that the invention "evidently belongs to an old art which appears to have advanced step by step for many years as the demand of the trade required." All those were matters of fact for the jury to determine, and it would not have been proper for the court to

have instructed them regarding the same, certainly not in the argumentative language reported.

In Transit Development Co. vs. Cheetham (194 Fed., 963), decided by the Court of Appeals for the second circuit in February, 1912, it was held that in an action at law for infringment upon conflicting proof it is a question for the jury to pass on whether a patented invention is of a primary character and the patent a primary patent. See also the case of Heide vs. Panoulias (188 Fed., 914), decided by the same Circuit Court of Appeals.

The same ruling was made in the case of Royer vs. Schultz Belting Co. (135 U. S., 319), where the court held that it was a question for the jury to pass upon whether a patented invention was of a primary character.

In opposition counsel for plaintiff in error cites the decision of this court in *Holt* vs. *Best* (172 Fed., 409). But that case is not in conflict with the ruling made by the Supreme Court and the Circuit Court of Appeals for the Second Circuit hereinabove cited. In the Holt case there was no question or conflict of evidence as to the character of the invention. It was on its face an improvement in combined harvesters and threshers and consisted solely in the location of a supplemental engine upon the harvester frame and connecting it by means of a flexible pipe; in other words, a mere change in the location of the supplemental engine. The patentee himself testified "that

"the novelty of his invention consisted in mounting a "supplemental engine on the harvester frame with "a flexible steam connection." And in commenting on this the learned judge of the lower court stated that "the crux of the invention was the mounting "of the supplemental engine upon the harvester frame "and connecting it with a plastic or flexible connec-"tion." And this court said (p. 413) "that the nov-"elty claimed for it consisted chiefly in the location "of the supplemental engine on the frame of the "harvester and the transferring of the power from "that engine to the header and thresher mechanisms "by means of a flexible pipe; in other words, what "Best did was, not to invent a combined steam har-"vester, but to make improvements in such harvesters, "and his patent shows upon its face that he himself "so characterized his invention."

It will be seen from the foregoing that the status of the invention was entirely free from doubt in that it was admitted by the patentee and his expert to be of secondary, and not primary, character. There was no conflict of evidence on the subject, and under such circumstances the court ruled the matter to be one of law. In other words, where it appears from the evidence of the patentee and his expert, as well as from the face of the patent itself, that the invention is not of a pioneer character, the court may so instruct the jury. In the case at bar we are in conflict with the situation which prevailed in the

Holt case, and, consequently, an instruction which was proper in the Holt case would not be proper in the case at bar.

Furthermore, as we have heretofore shown, the state of the art as shown by the prior patents relied on as limiting the scope of the Nielsen patent have not been incorporated in the bill of exceptions and are not properly before this court for consideration. Consequently, it is impossible for this court to say whether or not the Nielsen invention was of a pioneer character or not.

ASSIGNMENTS OF ERROR XI, XII, XIII, XVII, XX, XXIV
AND XXVII.

These assignments have been bunched by counsel for plaintiff in error, and he states in his brief (page 33) that they will not be discussed at length separately, but that they will be considered generally under the discussion of the merits of the case, which begins at page 33 of the brief.

Before proceeding with an examination of the said assignments, we desire to make a few brief remarks regarding the assignments of error themselves. Assignments XI and XII, referred to at page 17, et seq., of counsel's brief, and at page 313, et seq., of the record, relate to the file-wrapper contents of the Nielsen patent, and we shall consider that matter later on.

Assignment XIII, so specified by counsel at page 19 of his brief, seems to be a repetition of assignment XXII, copied at page 23 of the said brief. On

referring to the assignment of errors in the record, we find at page 315 assignment XIII, which does not relate to this subject matter at all, but is of a wholly different character relating to the file-wrapper contents. We do find, however, at page 328 of the record assignment XXII, which, as we before observed, appears to be a repetition of counsel's assignment XIII appearing on page 19. Possibly this "mix-up" in the brief may be straightened out by the assumption that assignment XIII, appearing on page 19, is a mistake, and was intended for some other assignment. What that other assignment was, of course, we have no way of knowing. The fairest thing to do is to treat assignments XIII and XXII appearing in the brief'as intended only for one assignment. So treating it, it is of no avail

In the first place, it commences by saying:

"Applying these rules of law directly to the case in hand, you will take the defendant's exhibits —, which are shown by the testimony, and if you believe them or either of them to have been made or used long prior to the date of the plaintiff's patent or the application thereof, as testified to, you will examine their construction and their mode of operation; you will ascertain how the joints are formed as shown by the models and the testimony, and what sort of protuberances there are on the outside and how they are formed, and if you find that they show a horn made up of a plurality of strips, no difference how many or how few, so there is more than one, and that the protuberances on the outside are ribs in the sense

of the patent in suit, and that the union of the strips are united by means of the ordinary and old lock, lap or flanged joints or seams, then you must find for the defendant."

But there are no specific exhibits designated in the above assignment. It refers generally to "defendant's exhibits ——." This court has no way of ascertaining or knowing what exhibits were referred to. Nor did the lower court have any way of knowing what were the exhibits referred to. It may be that that was one reason why the instruction was refused, although there are many others.

But even if the exhibits had been specified in the assignment, it would not be of any avail because the prior patents showing the state of the art were not embodied in the bill of exceptions nor are they properly before this court.

And still further, the request would have been an improper instruction because it assumes that the Nielsen invention would be anticipated by a horn made of two strips or halves united together so as to produce ribs on the outside. This assumes that the Nielsen invention consists of but two elements, a plurality of strips (two for instance) with ribs on the outside. But this is not the invention. The invention consists of a combination of several elements, of which a plurality of strips is one and ribs on the outside another. In addition to these there are other elements of the combination, notably the curving or tapering of the

strips in plan, whereby a flower or bell shape is produced.

And still further, the last part of the request relates to the subject matter of invention and is couched in such vague and general phraseology as to be productive of confusion rather than of clearness, while the first part of the instruction relates to a wholly different matter, to wit, the question of anticipation by certain unspecified exhibits of the prior art.

Assignment XVII relates to the question of pioneership of the invention and may be disposed of on the same lines as assignment X heretofore considered.

Assignment XX relates to the question of what is or is not invention. It endeavors to draw the distinction between invention and mechanical skill. It is a lengthy dissertation on the subject, quoting excerpts from opinions of the Supreme Court, asking argumentative questions, and furnishing dictionary definitions. The court correctly instructed the jury on the subject matter of invention, beginning near the bottom of page 273 of the record and continuing on the next page thereof. After having given that charge it was no error to refuse the one suggested by counsel.

Assignment XXIV was given in part by the court, the part which the court refused to give was improper because it was argumentative.

Assignment XXVII relates to "a patent issued to one Villy dated —, 1903." We assume that this was intended to apply to the original Villy patent, No. 739,954, though the assignment of error does not so state. We shall refer to this patent more in detail later on. For the present it is sufficient to say that the said Villy patent was not incorporated in the bill of exceptions, and for that reason alone is not before the court for consideration.

At page 26 of his brief, counsel states that he also relies on the assignment XVIII, but he makes no detailed argument thereon nor does he refer to it in any other way. We think the most casual reading of the same will convince the court that the request was properly refused.

We think the foregoing views are sufficient to dispose of this case, but we shall now meet counsel on his own ground and consider his detailed argument just as if there were valid exceptions and assignments of error in the record upon which to base it, and we shall follow the points made by him *seriatim*.

CONSTRUCTION OF THE NIELSEN PATENT.

Beginning at the bottom of page 35 of his brief, he gives his views on this subject. Reduced to compact form, those views are that Nielsen's claim 2 must be construed strictly and literally, without application of the doctrine of equivalents at all, and that when so

construed there is no infringement. As to claim 3 the argument is that it must be construed broadly and liberally, applying in the broadest possible way the doctrine of equivalents, and that when so construed it is anticipated by the prior art. That these views are unsound we shall now undertake to show.

Claim 2 of the Nielsen patent reads as follows:

"A horn for phonographs and similar machines, the body portion of which is composed of longitudinally arranged strips of metal provided at their edges with longitudinal outwardly-directed flanges, whereby said strips are connected and whereby the body portion of the horn is provided on the outside thereof with longitudinally-arranged ribs, 'said strips being tapered from one end of said horn to the other, substantially as shown and described."

The only terms of this claim requiring construction are the above italicised expressions "outwardly-directed flanges" and "said strips being tapered from one end of said horn to the other."

OUTWARDLY-DIRECTED FLANGES.

In regard to this element it is argued by the other side (Brief 37), that it is limited to the "particular form of outwardly-extending flanges b³ for forming the specific rib b²."

At page 45 it is also stated that Nielsen's invention "resided in the particular construction of rib." At page 48 the invention is referred to as residing "in his specific form of strengthening rib, consisting of the

butt seam formed of the outwardly-directed flanges."

In fine, their contention is that this element of claim 2 is limited to the "precise form" illustrated in the drawings of the patent, to wit, a seam formed by two right-angled flanges abutting against each other, commonly known and called in the tinsmith's art the "butt seam."

It is further pointed out in the brief (page 37) that Nielsen could not have intended to include within his invention any other construction of seam, for instance, a seam of the lock form, because that was old in the art. This conveys the impression that the invention resided in the seam itself. Such contention is erroneous. The Nielsen invention did not reside in the form of seam, but in the combination of various and sundry elements, one of which was a seam.

It is also pointed out in the brief (page 38) that Nielsen may have thought that his specific form of butt seam made a stiffer and more rigid rib and tended to minimize the metallic vibrations more than any other form of seam would do. But this is likewise an erroneous impression. The butt seam is not stronger or more rigid than the lock seam. In fact, we think the lock seam is stronger, stiffer, and more rigid than the butt seam, because the butt seam consists simply of two flat flanges abutting against each other and secured together, while the lock seam consists of two flanges interlocked or hooked together, and then hammered down securely, a construction which is plainly stronger and more rigid than the butt seam.

Furthermore, Nielsen could not have believed or intended to convey the impression that his invention resided in the form of butt seam illustrated, because that seam was just as old in the art as the lock seam. This is made apparent by the testimony of witnesses examined in the East by plaintiff in error. Furthermore, such a seam is shown in the prior patents to Barnard, of July 27, 1875 (Exhibit Book, p. 21), Bayles, of July 2, 1889 (Exhibit Book, p. 31), and Lanz, of July 12, 1900 (Exhibit Book, p. 41). We see, therefore, that both the butt seam and the lock seam were old at the time of Nielsen's invention. The law required him to illustrate in his patent one and only one form of seam, and he accordingly illustrated the butt seam. So far as his invention is concerned he might just as well have illustrated the lock seam. The law does not allow him to illustrate but one form of seam, and when he has illustrated that one form, he is entitled to any and all other forms which perform the same function in the same manner. This has been elementary law ever since the decision in Winans vs. Denmead (15 How., 330).

It is to be noted in this connection also that in actual practice Nielsen used both forms of seam. He first began to use the butt seam, but afterwards changed to the lock seam because it was cheaper to make (Deposition of Krabbe, Record 42-43, 45 and 61).

The Judge of the lower court took the same view of the matter, stating that his impression of the patent

would be that the mere manner of forming the rib or joint was not essential (Rec. 65-6).

It seems clear to us, therefore, that this expression in claim 2 is not to be limited to the right angle flanged seam known as a butt seam, but includes any other form of seam which is a mechanical equivalent. That the lock seam is a mechanical equivalent cannot be denied. Indeed, we do not understand opposing counsel to contend that the two seams are not mechanical equivalents, but we understand his position to be that Nielsen is not entitled to the doctrine of equivalents at all. Such was the exception taken (Rec. 282). The error of such contention is apparent when it is remembered that all patents, whether broad or narrow, are entitled to the doctrine of mechanical equivalents. The leading case on this subject is Continental Paper Bag Co. vs. Eastern Paper Bag Co. (210 U. S., 413), commonly called the "Paper Bag Patent case." That case is parallel with the one at bar. In considering this question, the court there said (413):

"It does not depend, counsel for the Continental Company says, upon any issue of fact, but does depend, as questions of infringement sometimes do, upon a point of law. This point of law, it is further said, has been formulated in a decision of this court as follows:

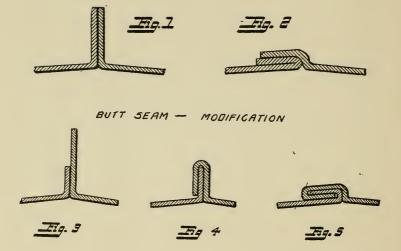
"'Where the patent does not embody a primary invention, but only an improvement on the prior art, and defendant's machines can be differentiated, the charge of infringement is not sustained.' Counsel for respondent do not contend that the Liddell invention is primary within the definition given

of that term by petitioner. Their concession is that it is 'not basic in the sense of covering the first machine ever produced to make self-opening square bags by machinery.' They do contend, however, that it is one of high rank, and if it be given a 'fair construction and scope, no matter whether we call it basic, primary, or broad, or even merely entitled to be construed as covering obvious mechanical equivalents, the question of infringement of the claims in suit by petitioner's machine becomes mechanically, and from a patent law standpoint, a simple one, in spite of slight differences of operation, and of reversal of the moving parts. The lower courts did not designate the invention as either primary or secondary. They did, however, as we shall presently see, decide that it was one of high rank and entitled to a broad range of equivalents. It becomes necessary, therefore, to consider the point of law upon which petitioner contends the question of infringement depends."

The court then goes on to examine prior decisions and deduces therefrom the conclusion that they were not meant to decide that only pioneer patents are entitled to invoke the doctrine of equivalents, but merely that the range of equivalents depends upon and varies with the degree of invention, and at page 419 the court concludes as follows:

"The discussion thus far brings us to two propositions: that infringement is not averted merely because the machine alleged to infringe may be differentiated from the patented machine, even though the invention embodied in the latter be not primary; and, second, that the description does not necessarily limit the claims."

BUTT SEAM - ORDINARY FORM



LOCK SEAM



The conclusion reached by the court was that all patents, whether primary or secondary, were entitled to the doctrine of equivalents.

Any number of cases might be cited on this point, but we content ourselves by referring to the latest one, Lang vs. Twitchell, 207 Fed., 363, decided August 11, 1913, where the court says:

"The doctrine of equivalents applies to all classes of invention, although more particularly to those of a pioneer character."

It will be seen, therefore, that the contention of our adversary to the effect that claim 2 is limited to "the precise construction" shown in the patent and is not entitled to the doctrine of equivalents at all, is without warrant in law. Such being the case, the only question for consideration is whether the lock seam is the equivalent of the butt seam when used in a phonograph horn for joining the strips together. That it is such equivalent cannot well be denied. It is too plain and palpable for dispute. Indeed, we do not understand that it is in dispute.

But after all, an analysis of the matter will show that the infringing horn does literally and strictly employ the seam called for by claim 2. The expression used in claim 2 is "longitudinal outwardly-directed flanges." The infringing horn has "longitudinal outwardly-directed flanges." This we can show by diagrams on adjoining page. Fig. 1 is intended to show the "precise construction" disclosed in the Nielsen pat-

ent, being a cross-sectional view of two adjoining strips of metal having right angled flanges abutting against each other and extending outside of the horn. In Fig. 2 the upright flanges of Fig. 1 are represented as being bent down flat. Such bending has not changed the construction in any material respect and the form shown in Fig. 2 is just as truly "outwardly-directed flanges" as the form shown in Fig. 1. The flanges are still there, they are still outwardly-directed with reference to the horn, they still connect the two strips together, and they still provide longitudinally arranged ribs on the outside of the horn. So far all is plain sailing.

We now go a step further and invite the court's attention to the second line of diagrams, Figs. 3, 4, and 5. These represent a slight modification of Figs. 1 and 2. Fig. 3 is the form of construction shown in the Nielsen drawings with the exception that one of the flanges is longer than the other. Surely that change would not take the structure outside the patent. In Fig. 4 we have folded the upper end of the long flange down over the short flange. Neither has this change taken the structure outside of the patent. Fig. 5 we have bent the flanges of Fig. 4 down flat on the body of the horn. Neither has this bending down operation changed the essential characteristics of the joint. Fig. 5 shows longitudinal flanges, outwardly-directed, joining the strips together, and producing longitudinally arranged ribs on the outside of the horn, and it would be idle for a person using that form to contend that he was not infringing on claim 2, assuming that he had all the other elements of claim 2. It may be noted in passing that the forms shown by Figs. 3, 4, and 5 were old in the art, being shown in Figs. 6, 7, and 8 of the prior patent to C. L. Hart, of 1889 (Exhibit Book, p. 27).

We now advance to the final step in this analysis and invite the court's attention to the two figures constituting the third line of the illustrations. Fig. 6 is a cross-sectional view of two adjoining strips of metal before they are interlocked for the purpose of forming a lock seam. The opposing hooks shown are simply interlocked and then hammered down. The result of that operation is Fig. 7, which represents the standard form of lock seam. But this Fig. 7 is identical with Fig. 5, which Fig. 5 was produced by merely bending down a specific form of butt seam. Fig. 7 shows longitudinal flanges, outwardly-directed, connecting two strips together, and providing longitudinally arranged ribs on the outside. It is in the strictest and most literal sense of the term within the language "outwardly-directed flanges." It is needless to remark that this Fig. 7 represents the form of lock seam shown in the infringing horn. It has been exaggerated a trifle in the drawings for the purpose of more clear illustration, but has not been changed in any material aspect. Our conclusion, therefore, is that the lock seam shown in the infringing structure is not only within the true intent and meaning of the term used in claim 2, but that it is also within the strict language of said term.

Before leaving this subject, we desire to refer to some desultory statements found in counsel's brief in connection therewith. At page 39, it is stated that it was old in the art to use ribs to minimize the vibratory character of phonograph horns, and that it makes no difference whether said ribs are arranged longitudinally or crosswise. In that connection he refers to the patent of Osten and Spalding (Exhibit Book, p. 45). On referring to that patent, we find that the horn is pyramidal in shape, made of four wooden sides forming a body part of rectangular cross section. Its interior is partitioned off into a plurality of small horns by wooden partitions acting as sounding boards, and also sound posts are sometimes used in conjunction with the sounding board partitions. These wooden obstructions within the horn act as sounding boards to communicate vibrations to the sides of the horn and vice versa, acting practically in the same manner as do the sounding posts in a violin. On the outside of the sound boards wooden cleats or strips are attached crosswise, and these strips are said to strengthen the tone and vibrations as well as to make the horn more durable. It would be difficult to find in this structure anything analogous to Nielsen's invention. Nielsen operated on metal horns, and his fundamental idea was to so construct a metal horn as to do away with or minimize its vibrations. His desire was to retain the metal, because it had good qualities not possessed by other materials, and at the same time he desired to rid himself of certain bad qualities which inhered in the metal. Osten and Spalding dispensed with metal as a material and used wood, adding to it a set of sounding boards, etc., on the interior for the purpose of transmitting the vibrations to the sides of the horn. Their way of avoiding the metallic vibrations of metallic horns was to dispense with using metal at all. Nielsen's theory was that he would retain the metal as proper material for the horn, but would so construct it as to avoid the metallic vibrations. Each man sought to solve the problem in a different way.

On page 40 counsel also asserts that we failed to produce any evidence at the trial from witnesses skilled in the acoustical art showing that the theory of the Nielsen horn was correct in doing away with the metallic vibrations. We retort that he did not produce any evidence to the contrary, but practically acquiesced in the correctness of the theory. In our prima facie case we relied upon the statement to that effect in the patent. The prima facie presumption attaching to the patent was all that was necessary at that stage of the controversy, and there was no occasion for us to call witnesses skilled in the acoustical art to substantiate the patent in that regard. If the defendant below had contested the theory of the patent and produced witnesses to disprove it, then we would have been called

on in rebuttal to meet the situation. But nothing of that kind was done. The Nielsen theory was not contested, and in the absence of such contest we were justified in relying on the presumptive evidence of the patent. In this connection the counsel informs the court, at page 40 of his brief, that in suits brought by the Searchlight Horn Company against Pacific Phonograph Company and Babson Brothers, the testimony of several witnesses was produced to show that the Nielsen theory was highly doubtful and problematical. We have already adverted to the fact that counsel has no right in the case at bar to rely upon the records in other cases; but in that behalf we desire to remark that the testimony referred to in the other cases was merely ex parte opinions of interested persons who had been infringing the Nielsen patent, and that in reply thereto we produced the printed statements of the National Phonograph Co., published in the "Talking Machine World," to the effect that the horn there illustrated, which was in substance a Nielsen horn, was the one thing needed to make the Edison phonograph complete and that it gave to the reproduction of sound a clearness and sweetness not possible with other horns, and that prior thereto no talking machine had a satisfactory horn. The National Phonograph Company is owned and controlled by Thomas A. Edison and these statements may be considered as coming from him. They are more than sufficient to meet the ex parte opinions of interested infringers.

TAPERING STRIPS.

We now take up the second expression used in said claim 2, viz.: "said strips being tapered from one end of said horn to the other." The argument advanced against this expression is that the word "tapered" applies equally as well to cone-shaped and pyramidal-shaped horns and cannot be construed as limited to the bell-shaped form, and at page 41 of the brief it is asserted that Nielsen could just as well have illustrated his improvement by means of an ordinary conical horn. A reference to the specification and drawings of the Nielsen patent will show what is meant by the term "tapered" as used by the patentee. Fig. 1 of the drawings certainly shows a bell-shaped horn, illustrated as being composed of twelve metal strips, and the specification says (926-7):

"Fig. 1 is a side view of my improved phonograph horn."

Consequently, so far as concerns the drawings of the patent there can be no doubt that the patentee intended the tapering feature of his strips to produce a bell-shaped horn. Of course the drawings are a part of the patent and are entitled to be considered in construing the claims.

But the specification also is clear on the point under discussion. Beginning at line 40, page 1, thereof, it says:

"The main part a of the horn is bell-shaped in

form, and tapers outwardly gradually from the part a³ to the larger or mouth end a⁴, and this curve or taper is greater or more abrupt adjacent to said larger or mouth end."

It will be seen from this that the horn is bell-shaped, as shown in Fig. 1; also that it tapers outwardly gradually from the inner to the outer end, which taper becomes more abrupt as it approaches the outer end. The words "tapers outwardly" mean that the taper is in plan, and is not a taper along the edges of the strips nor a taper on a straight line like a conical or pyramidal horn. In fine, the expression "tapers outwardly" means substantially "flares or curves outwardly." It is also to be noted that the specification says that the taper begins gradually, but ends more abruptly as it approaches the outlet of the horn, and this feature is distinctly shown by Fig. 1.

And finally, the specification uses the expression "this curve or taper," thereby asserting in substance that the word "taper" is used in the sense of the word "curve." Consequently, when it is said that the horn is bell-shaped in form and tapers outwardly, etc., the patentee means that it curves outwardly. He thus furnishes his own definition of the word "taper," and such definition of the word does not include a straight taper of the conical and pyramidal horns of the prior art.

Again, beginning at line 53 of the specification, it is said:

"The body portion of the horn or the strips b

are composed of sheet metal and it will be observed that the inner wall of the body portion of said horn in cross-section is made up of a plurality of short lines forming substantially a circle, and it is the construction of the body portion of the horn as hereinbefore described that gives thereto the qualities which it is the objects of this invention to produce, which objects are the result of the formation of the horn or the body portion thereof of longitudinal strips b and providing the outer surface thereof with the longitudinal ribs b² and curving the body portion of the horn in the manner described."

Here, again, we find the patentee using the expression "curving" when applied to the body portion of the horn, and he says substantially that it is such curving and construction of the body portion of the horn as described that produce the objects sought by him.

Taking all these things together and construing the specification as a whole, so as to produce a harmonious result, we insist that the tapering feature called for by claim 2 is nothing more nor less than a curving of the metal strips in plan gradually for a portion of the distance but more abruptly adjacent to the outlet, whereby the bell-shaped form shown in Fig. 2 is produced. The essential characteristics of the invention are those specified by the learned Judge of the lower court at page 272 of the record:

[&]quot;I. It must be composed of a multiplicity of metal strips secured together at their longitudinal edges by a seam.

"2.. This seam must be of such construction as to produce longitudinal ribs on the outer surface of the horn.

"3. The strips are narrower in cross-section at

the inner end than at the outer end.

"4. The strips must curve outwardly from the inner to the outer end, but the curve is more abrupt

adjacent the outer end.

"Now combining these elements together in this way Nielsen produced a horn for phonographs and similar machines larger at one end than the other and having substantially a bell-shape and abruptly flaring outlet made up of longitudinally arranged metal strips secured together at their outer edges by a seam of such character as to produce longitudinal ribs on the outer surface."

And still further, claim 2 closes with the words "substantially as shown and described," to which some effect must be given. The words "as shown" refer to the drawings, while the word "described" refers to the specification. Consequently, this claim covers such an implement as is shown in the drawings and described in the specification, and such equivalents thereof as the patentee is entitled to. Certainly the drawing shows the tapering to be nothing more than a curve in plan. The specification uses the word "taper" as synonymous with the word "curve." It is the construction of the horn as described and curving the body portion of the horn in the manner described that constitute the essention features of the combination.

Claims must be construed in connection with the specification and drawings. Said the circuit court of

appeals for the first circuit in Mossberg vs. Nutter (135 Fed., 99):

"The claims of a patent are to be fairly construed so as to cover, if possible, the invention, and thus save it, especially if it be a meritorious one. In approaching a patent, we are to look primarily at the thing which the inventor conceived and described in his patent, and the claims are to be interpreted with this particular thing ever before our eyes. In confining our attention too exclusively to a critical examination of the claims, we are apt to look at them as separate and independent entities, and lose sight of the important consideration that the real invention is to be found in the specification and drawings, and that the language of the claims is to be construed in the light of what is there shown and described.

"There is much similarity in the foregoing claims of the Ericson patent, and the language is of a somewhat general character. This difference, however, may be noticed. Claim 2 is somewhat broader than claim 1, and claim 1 is somewhat broader than claims 3 and 4. Upon their face alone it may be that claims 1 and 2 are broad enough in their terms to include the Hill & Tolman and some other prior bells. The claims, however, must be read in connection with the drawings and specification; and, so construed, we find in each of these claims, appropriate language descriptive of the vital feature of the Ericson invention."

It has always been held that the clause "substantially as described" throws us back to the specification for a qualification of the claim and the several elements of which the combination is composed. It was

so held in the early cases of Seymour vs. Ohborne (11 Wall., 516), and The Corn Planter Patent (23 Wall., 218). This ruling has never been changed, and in the recent case of Westinghouse vs. Boyden (170 U. S., 558), where the court read into the claim a feature from the specification, two reasons therefor were given, one of which was thus stated (p. 558):

"One of these is for a triple-valve device, etc., for admitting air from the main air-pipe to the brake-cylinder 'substantially as set forth.' These words have been uniformly held by us to import into the claim the particulars of the specification, or, as was said in Seymour vs. Osborne, 11 Wall., 516, 547, 'When the claim immediately follows the description of the invention, it may be construed in connection with the explanations contained in the specifications, and when it contains words referring back to the specifications, it cannot be properly construed in any other way.' In that case it was held that a claim which might otherwise be had as covering a function or result, when containing the words 'substantially as described,' should be construed in connection with the specification, and when so construed was held to be valid. To the same effect is The Corn Planter Patent, 23 Wall., 181. 218."

Accordingly, the Supreme Court read into the Westinghouse claim an auxiliary valve, although not specified therein *eo nomine*, saying in that connection:

"In thus reading the specification into the claim, we can adopt no other construction than to consider it as if the auxiliary valve were inserted in the claim in so many words."

Many other cases to the same effect might be cited, but we shall cite only one, that of Willcox & Gibbs Sewing Machine Co. vs. Industrial Mfg. Co., 161 Fed., 744. The invention covered the combination of certain elements in a sewing machine mechanism, one of which was designated broadly as a looper. The claim read as follows:

"The combination, with the needle, the looper, the feed mechanism, and the trimming mechanism, of the main shaft," etc., etc., etc.

It will be observed that the term "looper" used in the claim was not limited by any qualification; but the specification described the looper as being a "double-jawed looper." In construing the claim the court held that by virtue of the words "substantially as described" the looper of the claim must be construed to cover only the double-jawed looper shown in the specification, See Robins & American Co. 145 Fed. 226.

Under the rulings of the Supreme and other courts respecting the words "substantially as shown and described," there is no difficulty in construing claim 2 as including the bell-shaped feature shown in the drawings and described in the specification.

CLAIM 3 OF THE NIELSEN PATENT.

Having disposed of claim 2, we now take up claim 3 of the Nielsen patent, which reads as follows:

"A horn for phonographs and similar instruments, said horn being larger at one end than at the other and tapered in the usual manner, said horn being composed of longitudinally arranged strips secured together at their edges and the outer sides thereof at the points where said strips are secured together being provided with longitudinal ribs substantially as shown and described."

So far as the mere matter of phraseology is concerned, this claim differs from claim 2 in three respects, viz.: (1) it does not prescribe that the strips must be made of metal, (2) it does not provide that the union of the strips must be by outwardly directed flanges, and (3) it inserts the phrase that the horn is "larger at one end than the other and tapered in the usual manner." We shall examine these seriatim.

THE STRIPS OF CLAIM 3.

So far as concerns the broad use of the word "strips," without the qualification added that they must be of metal, there can be no room for doubt respecting the meaning. The whole theory of the invention is based on the fact that the strips must be of metal. It was a metal horn, and a metal horn alone, which Nielsen undertook to devise. The prior horns on which he undertook to improve were metal horns, made generally of a single piece of metal folded around a conical form but sometimes of two pieces or halves of metal of conical contour joined together at their edges. In both those styles of metal horns a defect existed, viz.: the defect of counter vibrations induced by the large integral mass of metal. To ob-

viate that defect, Nielsen conceived the idea of dividing up said large expanse of integral metal into a number of narrow longitudinal strips and providing ribs on the outside of the horn at the juncture of each pair of adjoining strips. By that construction he broke up or minimized the vibrations of the onepiece and two-piece metal horns. He retained the horn material, the metal, because that was the best material to use by reason of other considerations. To have dispensed wholly with the metal and substituted some other material would have been "outside of and beyond the inventive thought." In fine, he recognized the two facts that metal was the proper material of which to make the horn on account of its resonant qualities and the further fact that as theretofore made the metal horns contained a defect, and his idea was to retain the metal material so as to preserve the good qualities thereof, but at the same time to change the form of construction so as to obviate the bad qualities. This he did by dividing up the integral expanse of metal into a multiplicity of narrow longitudinal sections curved in plan and providing outside ribs. Consequently, this claim 3 must be limited to metal strips, and it is thus limited by reference to the specification and the use of the words "substantially as shown and described." We have already cited authorities showing that it is allowable in a case of this kind to refer back to the specification for further particulars, and we invoke that doctrine here with regard to the material of which the strips of claim 3 are composed. We insist, therefore, that the strips of claim 3 must be construed as intended to cover and actually covering strips made of metal. To otherwise construe the term would be to give a monopoly of all kinds of strips, whether made of paper, cardboard, celluloid, wood, or other material not metal. Now, as it appears clear from the specification that one feature of Nielsen's invention inheres in metallic material, the claim must be construed as limited thereto.

THE SEAM OF CLAIM 3.

In regard to the second feature of the claim, which says that the strips are secured together at their edges, without specifying the particular form of seam by which they are so secured, it is to be observed that the claim also provides that the union is such that at the points where such strips are secured together longitudinal ribs are provided. In other words, the union must be a joint of that kind. This again forces us back to the specification for the character of the union, and we there find that the preferred form is specified as one having outwardly directed flanges. It may be there is some other form of union which will result in outside ribs without utilizing outwardlydirected flanges. It is not necessary for us to inquire into that point. It is sufficient to say that in claim 3 the essence of this element consists in being of such form that it will result in outside ribs. If this result

cannot be produced by any other form of structure than that of outwardly-directed flanges, then the claim will be limited to that and mechanical equivalents thereof. If, however, there can be any other form by which the result will be obtained, different from the outwardly-directed flange form, then the claim will be broad enough to include that form. It will be seen that the reason for omitting specifically the outwardly-directed flange form in this claim, was to cover the probable contingency hereinabove adverted to, viz.: that there might be some form of union producing the outside ribs different from the outwardly-directed flange form. In that respect claim 3 is broader than claim 2. The point, however, is more academic than material in this case, because the claim certainly covers the outwardly-directed flange form and its equivalents, and we have already shown that the infringing structure utilizes such form or its equivalents.

TAPERED IN THE USUAL MANNER.

The third difference hereinabove adverted to, that this claim adds the expression "said horn being larger at one end than the other and tapered in the usual manner," is not altogether free from doubt as a mere matter of language. Provision that the horn shall be smaller at one end than the other is shown by the construction of the metal strips, which are narrower in cross section at the inner end than at the outer end. To make a bell-shaped horn from longitudinal metal

strips which curve or taper outwardly in plan necessarily assumes that said strips must be narrower in cross section at the inner end than at the outer end. Such is the construction shown in the drawings, and such was the instruction given by the lower court to the jury in reference to this matter.

Considering now the qualification that the said strips are "tapered in the usual manner," we are met with the only verbal ambiguity that inheres in the claim. The expression is awkwardly worded, probably due to a loose and ill considered use of language, so often evinced by solicitors of patents. In such cases it is the duty of the courts to give to the language the most reasonable construction of which it is susceptible to the end that the claim may be made to square with the actual invention shown and described in the drawings and specification. Artificial rules of the interpretation are not to be adopted. The true principle is to so construe the claim as to uphold the invention. Courts will not be astute to destroy claims by adopting rigid artificial and unfavorable rules of construction. This principle must be kept constantly in mind.

Now, what is meant by the expression "tapered in the usual manner"? Does it mean tapered in the manner in which the horns of the prior art were usually tapered, or does it mean tapered in the manner in which the patentee usually tapered his horn as shown and described in his drawings and specification? The horns of the prior art were tapered in several ways. The ordinary conical horn had a taper on a straight line from the inner to the outer end, whereby a convex outer surface was produced. See prior patent to Porter (Exhibit Book 49), also British patents to Fairbrother (Exhibit Book 84), and Thompson (Exhibit Book 69), and Tourtel (Exhibit Book 77).

Another form of horn showing a taper is that of Osten & Spalding (Exhibit Book 45), which is a wooden horn made in pyramidal shape. The taper there is on straight lines, while the outside surface consists of four flat planes, thus distinguishing it from the convex outside surface of the other patents cited. A modification of the Osten & Spalding taper is shown in the patent of Cairns (Exhibit Book 18), where the horn is represented as of polygonal form, in this particular instance octagonal, showing a taper on straight lines producing eight flat surfaces.

A still different form of taper is shown by the patent of Fallows (Exhibit Book 24), where the taper is of spiral form.

And still another form of taper is shown in the patent of McVeety & Ford (Exhibit Book 54), which is of nondescript character producing a shape somewhat similar to a horn of plenty.

And finally, we find in the patent of Villy (Exhibit Book 59) a taper in plan similar to that of Nielsen, whereby a concave outer surface is produced, though in this case the strips are not of metal, but of paper or similar material.

The same general form of taper is also shown in the prior patent of Shirley (Exhibit Book 11), covering a glass vase, and still further the court will take judicial knowledge of the fact that musical blowing instruments, such as the cornet, bugle and trombone, show a taper in plan similar to that of Nielsen save for the fact that the musical instruments are composed of one piece.

Now, which of these various forms of taper shown in the prior art did Nielsen have in mind when he used the expression "tapered in the usual manner," if it be a fact that those words refer to the tapers in the prior art? Did he refer to the straight taper producing a convex surface, or to the straight taper producing a pyramidal surface, or to the straight taper producing an octagonal surface, or to the spiral taper, or to the taper of the strips in plan producing a concave surface, as shown in the Villy and in Cairns patents as well as in instrumental musical horns? In view of the fact that the straight tapers referred to, which resulted in convex and flat polygonal outside surfaces, are not shown or adverted to in the Nielsen drawings or specifications, it would seem plain that this expression in claim 3 did not refer to that kind of taper. And in view of the fact that Nielsen's drawings and specification do show and describe a taper in plan producing a concave outer surface, similar to that of Villy, Cairns, and the musical instruments, it would not be an unreasonable theory to hold that that was the kind of taper referred to by Nielsen when he used the expression "tapered in the usual manner." There is no more reason why the words "tapered in the usual manner" should be taken as referring to the conical and polygonal horns, as claimed by opposing counsel, than that they should be taken as referring to the form of taper shown in the Villy patent. Indeed, there is stronger ground for holding that those words referred to the form of taper shown in the Villy, Cairns, and musical devices inasmuch as that form conforms generally with the Nielsen form, and inasmuch as Nielsen does not claim the bell-shaped form per se and by itself, it being only one of the elements of his combination. He had a perfect right to borrow that element from the Villy or Cairns patent or the musical horns, and make it one of the elements of his combination, just as he had a right to borrow any other element from any other prior patent. We have already shown that his invention is a combination of old elements united together in a new structure.

But there is another possible view to take of the words "tapered in the usual manner" of claim 3. Nielsen had already illustrated in his drawings the form of taper he adopted and he described it in his specification, from which it appears to be a taper or curve outwardly, gradually from the inner towards

the outer end and more abrupt adjacent the outer end, whereby a concave outside surface and a convex inner surface of the horn were produced, in fine, a flaring bell-shaped horn. He then proceeded to insert claims 1 and 2 of his patent, and we have already seen that claim 2 included this particular kind of taper, or bell shape of the horn. He then winds up his patent with claim 3, the last one thereof, wherein he says that the horn is tapered in the usual manner. It is not a forced construction to hold that these words "tapered in the usual manner" of claim 3 mean that the horn of claim 3 was tapered in the usual manner in which Nielsen tapered his horn, as shown in his drawings and specification and claim 2. By adopting this construction of the words, all ambiguity disappears. To adopt the view of opposing counsel only produces further ambiguity, because in the prior art there were several different ways of tapering horns and other structures. As claims must be construed liberally with a view to vitalizing rather than paralyzing the grant, we submit that our suggested construction of the words in question is one which would dissipate all ambiguity and meet the ends of substantial justice.

There is very little difference between this claim 3 and claim 2. Claim 3 is a trifle broader in its omission of the term outwardly-directed flanges as a means of joining the metal strips together, and by reason of that omission may include cases other than

the infringing horns herein. For that purpose the claim is valuable and is to that extent differentiable from claim 2. But even if the claims were practically co-extensive no harm could result therefrom.

In Westinghouse vs. Borden (170 U. S., 561) the Supreme Court said of two claims, "the other two claims are practically but little more than the same expression of one and the same invention."

It is sometimes the case that two claims may be practically co-extensive though different somewhat in phraseology, and it is not improper to insert both claims in a patent. The shade of difference between them may be slight, and it is merely out of abundance of caution that the solicitor varies his phraseology. The ingenuity of infringers is so great that it is impossible to conceive of all possible cases that may arise. Two claims may be practically co-extensive, but different in phraseology, so that a device might not fall within the phraseology of one while it would fall within the phraseology of the other. It is generally the effort of the infringer to produce a device which is outside of the language of the claims, and in such case he triumphantly exclaims: "I do not even fall within the language of the claim, much less within the substance." Consequently, it is not improper for a patentee to frame two claims in different phraseology, though they may be co-extensive in substance. We are free to confess that there is only a slight shade of difference between Nielsen's claim 2

and claim 3; but there is a slight shade of difference in reference to the joining of the metal strips together, and out of excess of caution claim 3 was inserted. It may be that claim 2 will afford all necessary protection. If so, claim 3 will not injure anyone.

BELL-SHAPED FEATURE OF NIELSEN'S HORN.

Beginning at page 41, opposing counsel treats of this matter and asserts that the bell-shape of the horn was no part of Nielsen's invention. We have already discussed this matter and merely reiterate that the bell-shaped feature is one of the elements which make up the Nielsen combination. Undoubtedly Nielsen did not invent the bell shape per se. That was old in the art. He was entitled, however, to utilize it as one of the elements of his combination. This is elementary law.

It is also insisted at page 43 of the brief that the Nielsen specification does not describe his metal strips as being curved along their edges, whereby the bell-shaped feature is produced, and it is also pointed out that that matter is shown and illustrated in the Villy patent. This is directly in line with our argument. Nielsen was entitled to use that feature of construction, and to borrow it from the Villy patent or any other source in order to make it one of the elements of his combination. Consequently, it was not necessary for him to describe it specifically, because he was presumed to know the prior art.

It is also insisted, at page 47 of the brief, that the Nielsen claims are not restricted to a curved or bell-shaped horn. This is erroneous. We have already shown that by proper construction of the claims the bell-shaped feature is one of the elements thereof.

Along the same lines, the brief, at page 49 et seq., asserts that the lower court had a wrong impression as to Nielsen's invention in holding that the particular form of seam shown in the specification joining the sections is not essential to the integrity of the invention, and in that connection it is pointed out that our argument in the lower court was different in that regard from what it is in this court. The statement is erroneous. Our argument in the lower court was precisely the same as the argument we are now making. We have not changed our position a particle. We knew as well in the lower court as in this court that bugles, cornets, and trombones were bell-shaped and that Nielsen did not claim to be the inventor of that shape per se.

At page 50 of the brief, it is stated that the lower court erred in instructing the jury that the Nielsen horn was composed of a multiplicity of strips. The argument in that behalf is that the patent merely calls for a plurality of strips, and as the word "plurality" in its broader significance means simply more than one, therefore the claims can be met by a horn having only two strips. But this is a misconception of the situation. A Nielsen horn cannot be made of two strips,

because two strips alone, when put together, cannot be made to curve or taper gradually in plan and still produce a bell-shaped horn. It may be asked then how many strips are necessary in order to produce a Nielsen horn. The answer is that this matter cannot be stated in any specific number of strips, but there must be a sufficient number of strips so that when put together and curved in plan they will produce the bell-shaped form. It was for this reason that the court used the word "multiplicity" instead of the word "plurality," telling the jury at the same time that he was describing the invention in colloquial language rather than in technical form. The use of the word "multiplicity" instead of the word "plurality" avoided all confusion in the minds of the jury. Patents must be given a reasonable and common-sense construction, not a literal and technical construction. It was by reason of this rule of construction that the lower court adopted the word "multiplicity" instead of "plurality."

Beginning at page 50, it is asserted that the words "curved" and "tapered" cannot be considered as equivalents, and that the curved feature of the strips cannot be read into the claims. We have already shown that the specification treats these two words as equivalents. In one place it says that "curving the body portion of the horn in the manner described" is one of the features of the invention. These references to the specification are amply sufficient for our conclusion.

In the same connection it is also insisted by opposing counsel that claim 2 requires the strips to be tapered, while claim 3 requires that the horn shall be tapered, and he seeks to draw a distinction between tapering the strips and tapering the horn. This is purely sophistical. The horn is composed of the strips. If the strips are tapered, then the horn is tapered. Vice versa, if the horn is tapered, then the strips are tapered. This is clearly recognized by the specification. In one part thereof it states that the main part of the horn is bell-shaped in form and tapers outwardly, etc., and in another part of the specification it says that the body portion of the horn is composed of strips "which are gradually tapered from one end to the other," and in still another portion of the specification it says "the body portion of the horn or the strips are composed of sheet metal, etc." These statements clearly uphold our position.

FILE WRAPPER CONTENTS OF THE NIELSEN PATENT.

Beginning at page 52 of his brief, counsel discusses this matter; but there is absolutely nothing in the file wrapper contents to weaken our position. On the contrary that document strengthens it. We have discussed this matter in our opening brief, beginning on page 33. It may not be necessary to say anything further on the subject, but we shall briefly recapitulate what was there said.

The original application contained the present

claims 1 and 2, and an additional claim reading as follows:

"3. A horn for phonographs and similar machines, said horn being tapered in the usual manner and the body thereof on the outer side thereof being provided with longitudinally arranged ribs, substantially as shown and described" (Exhibit Book, pp. 93-94).

On May 13, 1904, the Patent Office rejected above claim 3 upon the English patent to Tourtel and the United States patent to Fallows (Exhibit Book 95).

On June 6, 1904, Nielsen presented an amendment, which was filed June 7, 1904 (Exhibit Book 96-7), in which he added an additional claim, reading as follows:

"4. A horn for phonographs and similar machines, said horn being tapered in the usual manner and the body thereof on the outer side thereof being provided with longitudinally arranged ribs between which the longitudinal parts of the horn taper from one end to the other, substantially as shown and described."

It will be observed that by this amendment Nielsen did not at this time acquiesce in the ruling of the Patent Office regarding his claim 3, but merely added to his application still another claim.

Thereafter, on June 21, 1904, Nielsen presented an amendment, which was filed June 22, 1904 (Exhibit Book 98-9), in which he did not at that time acquiesce

in the prior ruling, but added still another claim reading as follows:

"5. A horn for phonographic and similar instruments, said horn being larger at one end than at the other and being composed of longitudinal tapered strips which are secured together at their edges, substantially as shown and described."

On June 22, 1904, the Patent Office rejected claims 3 and 4 on the prior patent of Clayton (Exhibit Book 97).

Thereafter, on June 29, 1904, Nielsen filed still another amendment (Exhibit Book 99), in which he added still another claim, reading as follows:

"6. A horn for phonographs and similar instruments, said horn being larger at one end than at the other and tapered in the usual manner, said horn being composed of longitudinally arranged strips secured together at their edges and the outer side thereof at the points where said strips are secured together, being provided with longitudinal ribs, substantially as shown and described."

Thereafter on July 21, 1904 (Exhibit Book 101), the Patent Office rejected claims 3, 4 and 5, as then numbered, citing the additional patent of Osten et al. No action was taken on claim 6, and thereupon, on July 27, 1904 (Exhibit Book 102), Nielsen demanded further explanation from the office, and in answer thereto, on August 5, 1904 (Exhibit Book 103), the Patent Office sent an answer rejecting claims 3, 4, and 5.

On August 26, 1904 (Exhibit Book 104), Nielsen accepted this ruling by cancelling his then numbered claims 3, 4 and 5, and renumbering his claim 6 as claim 3, which is the present claim 3 of the patent.

These proceedings place the matter in the same condition as if the original application had contained the six claims and the Patent Office had rejected claims 3, 4 and 5, and allowed claims 1, 2 and 6, the said last named three claims being the present claims of the patent, no one of which was ever rejected.

For convenience of reference we again quote the three rejected claims.

- "3. A horn for phonographs and similar machines, said horn being tapered in the usual manner and the body thereof on the outer side thereof being provided with longitudinally arranged ribs, substantially as shown and described.
- "4. A horn for phonographs and similar machines, said horn being tapered in the usual manner and the body thereof on the outer side thereof being provided with longitudinally arranged ribs between which the longitudinal parts of the horn taper from one end to the other, substantially as shown and described.
- "5. A horn for phonographic and similar instruments, said horn being larger at one end than at the other and being composed of longitudinal tapered strips which are secured together at their edges, substantially as shown and described."

These three claims were properly rejected. They

were too broad in language, being sufficient in form to cover a horn made from a single piece of metal or other material, conical in shape, and provided with integral corrugations on the outside. The patents on which these claims were rejected show such construction. When this was made apparent to Nielsen by the action of the Patent Office, he acquiesced therein and cancelled the claims, and the sum and substance of the matter is that he thereby admitted that his invention did not cover a horn made from a single piece of material, of conical shape, and having integral corrugations on the outside, or separate ribs or strips nailed or otherwise attached to the outside.

Therefore, this action of the Patent Office places the construction of the remaining claims as heretofore advanced by us. We insist that the claims of the patent cannot be construed to cover a one-piece horn of conical shape, and having integral corrugations, or separately attached ribs on the outside. And yet, strange to say, the learned counsel for plaintiff in error insists that such a construction must be given to the claims. The Patent Office rejected such construction by allowing the claims, and Nielsen acquiesced therein. He now reiterates the position taken both by the Patent Office and himself and insists that the present claims of the patent cannot be given the construction which was given by the Patent Office to the rejected claims. The Patent Office at no time gave to the present claims of the patent the construction which it gave to the rejected claims, and that for the reason that the language of the present claims of the patent prohibited such construction. The matter seems to us too plain for argument. The rule of law is that a patentee cannot claim something which was rejected by the Patent Office, cannot make his claims as allowed cover claims which were rejected. That rule of law we have endeavored religiously to follow; but the learned counsel for plaintiff in error says that Nielsen's allowed claims, which never were rejected or criticised by the Patent Office, must now be construed as co-extensive with the three claims which were rejected by the Patent Office. A more palpable misconception of law could not be well conceived of.

THE ORIGINAL VILLY PATENT, NO. 739,954.

This is discussed in the opposing brief at pages 60 et seq. While we have already discussed this patent, we venture to add a few words on the subject. The patent appears between pages 56 and 61 of the Exhibit Book. As appears by figure 1, on page 57, it is composed of a cone for about two-thirds of the distance from the inner end, while the outer end is in the form of a collapsible bell. The invention is said to relate to 'trumpet-like sound distributors for use on phonographs, ear-trumpets, fog-horns, and other sound distributing devices. Its object is said to be "to provide" a horn or trumpet-like device which can be folded "when not in use, so as to be capable of ready trans-

"portation and for placing within the case of the "phonograph or in the pocket of the user, when it is to be applied to an ear instrument or the like" (Specification, lines 14 et seq.).

Figures 2, 3 and 4 represent the bell end when collapsed. Figures 1 and 5 represent it when extended. The bell-shaped end, designated by the letter a, is said to be made from "a series of strips b, of paper, wood, linen, or other preferable flexible material" (lines 45 et seq.). It has been suggested that the Villy patent is not limited to said materials and that the horn may be made of metal by reason of the words "other preferably flexible material." But this is not sound; under the doctrine of ejusdem generis, metal is excluded.

It is further pointed out in the specification that these strips of paper, or other like material, are attached to a backing or foundation of linen, so as to form a hinge-like connection between each pair of strips, thereby allowing them to be collapsed by folding one upon the other in a zigzag manner. Upon the two extreme members of the series of strips eyelets, buttons, or other clip-like devices are provided for buttoning them together when extended. When it is desired to collapse the horn, it is unbuttoned, and the paper sections are then allowed to fold one upon the other. This folding and buttoning feature is shown in figures 2, 3 and 4 of the patent.

It will be seen from the foregoing that the Villy horn at the outer end is bell-shaped when extended and buttoned up, but is made of a multiplicity of strips "of paper, wood, linen, or other preferable flexible material," and these strips are glued to or pasted on a background of linen or like material, whereby a flexible joint is provided between each pair of strips, so that the strips may fold upon one another when collapsed. There are no ribs, certainly no ribs in the sense of the Nielsen patent.

This Villy patent differs from the Nielsen in that it is made of strips of paper or like material without ribs, having flexible joints so as to fold upon each other, and is not a permanent self-sustaining horn, but is collapsible for a special purpose. In order to produce a Nielsen horn, it was necessary to substitute strips of metal, to rigidly attach them together by a permanent joint, and to provide longitudinal ribs on the outside. The mechanical changes alone would be sufficient to sustain invention on the part of Nielsen. Wherever a mechanical change, however small, has been made over the old art, and the result of the change is to produce a highly useful device which practically revolutionizes the art, invention must be held to be present. It is wholly immaterial how small the mechanical change is. Many of the greatest inventions show only a slight mechanical change. The pertinent inquiry to make is what resulted from the mechanical change. If thereby a useless and worthless contrivance has been completed into one which is highly useful, that must be taken as the test. In this

case, it is quite apparent that the Villy horn as a horn for phonographs was a worthless contrivance. The witness Krabbe, who had personal experience therewith, testifies that he went to England to procure the Villy horn and brought it back to the United States with him, but did not manufacture any of the Villy horns, saying in that connection "that it was no use "to manufacture them, they were loose and would "fall to pieces. We would use them two or three "times. They were made out of paper. They were "not saleable and nobody would buy them. They were "not practical, and it was never sold or used in the "United States" (Record 55).

There was no denial of this testimony nor was there any attempt on the part of the defendant below to show that the Villy horn was practical or had any utility. In fact the Villy patent was merely a paper patent which never went into use. On the other hand, the Nielsen horn went into immediate use and revolutionized the art, being adopted by all the manufacturers, and it superseded all prior devices in the United States. Under these circumstances, it is wholly immaterial what was the extent of the mechanical change made by Nielsen over the Villy patent. It was sufficient to show that he made some mechanical change and that that mechanical change resulted as above stated.

But it is urged against us that a mere change of material is not invention and that at best all Nielsen

did was to change the material of which the Villy horn was made, and that the slight mechanical changes he made were those which would necessarily occur to a skilled mechanic in changing from one material to another. This argument is not sound.

It is not a universal rule of law that a change of material is not invention. Sometimes it is not invention, while at others it is.

The rule on this subject was announced by Mr. Justice Bradley in the case of *Hicks* vs. *Kelsey* (18 Wall., 673), as follows:

"The use of one material instead of another in constructing a known machine is, in most cases, so obviously a matter of mere mechanical judgment, and not of invention, that it cannot be called an invention, unless some new and useful result, an increase of efficiency, or a decided saving in the operation, is clearly attained."

In explaining this rule, the same learned justice, when sitting at circuit, in the case of *Celluloid Co.* vs. Fred Crane Chemical Co. (36 Fed., 111), points out many instances in which the substitution of one material for another amounts to invention, and in that connection says:

"So in *Hicks* vs. *Kelsey*, 18 Wall., 670, the court held that the substitution of an iron wagon-reach for a wooden one of the same shape and form was no invention; that the machine remained the same, and the adoption of a stronger material was a mere matter of mechanical judgment, and not of

invention. These cases depended on their own circumstances. There is no rule of law that the substitution of one material for another is not patentable."

In Smith vs. Vulcanite Co., 93 U. S., 494, the court said:

"The case of Hotchkiss vs. Greenwood, 11 How., 248, does not decide that no use of one material in lieu of another in the formation of a manufacture can, in any case amount to invention, or be the subject of a patent. If such a substitution involves a new mode of construction, or develops new uses and properties of the article formed, it may amount to invention. . . . The result may be the production of an analogous but substantially different manufacture. . . . If the result of the substitution was a new, a better, or a cheaper article, the introduction of the substituted material into an old process was patentable as an invention. . . These cases rest on the fact that a superior product has been the result of the substitution, a product that has new capabilities and that performs new functions."

Along the same lines is the case of *Potts* vs. *Creagor* (155 U. S., 608), where it is said:

"Applying this test to the case under consideration, it is manifest that if the change from the glass bars of the Creagor wood exhibit to the steel bars of the Potts cylinder was a mere change of material for the more perfect accomplishment of the same work, it would, within the familiar cases of Hotchkiss vs. Greenwood, 11 How., 248; Hicks vs. Kelsey, 18 Wall., 670; Terhune vs. Phillips,

99 U. S., 592, and Brown vs. District of Columbia, 130 U. S., 87, not involve invention. But not only did the glass bars prove so brittle in their use for polishing wood that they broke and were discarded after a half an hour's trial, but they would undoubtedly have been wholly worthless for the new use for which the Potts required them. Not only did they discard the glass bars, and substitute others of steel, but they substituted them for a purpose wholly different from that for which they had been employed. Under such circumstances, we have repeatedly held that a change of material was invention. Smith vs. Goodyear Dental Vulcanite Co., 93 U. S., 486; Goodyear Dental Vulcanite Co. vs. Davis, 102 U. S., 222."

To the same effect is the very recent case of *Protector* vs. *John Pell* (204 Fed., 458), which involved the substitution of a fibrous material for metal. It was there contended that the patent was simply for a substitution of materials, yet the court held that such substitution amounted to invention, saying at page 458:

"It is true that the substitution of one material for another is ordinarily a mere matter of mechanical judgment and does not involve invention, but while that, speaking generally, is so, it nevertheless does not fully state the rule given below, which has been followed ever since it was first promulgated by Mr. Justice Bradley, in *Hicks* vs. *Kelsey*, 18 Wall., 670, 673."

The court then cites the rule from the Hicks vs. Kelsey case, which we have heretofore quoted.

In addition we may cite the following cases as illustrative of the rule:

King vs. Anderson, 90 Fed., 500;
Frost vs. Cohn, 119 Fed., 505;
Hogan vs. Westmoreland, 163 Fed., 289;
National Casket Co. vs. Stoltz, 153 Fed., 765;
Geo. Frost Co. vs. Samstag et al., 180 Fed., 739;
Edison vs. U. S. Electric Co., 52 Fed., 300;
Perkins vs. Lumber Co., 51 Fed., 291.

Walker on Patents, Section 29, gives the rule as follows:

"Important exceptions have, however, been established to the general rule of the last section. If the substitution of materials involved a new mode of construction, or if it developed new properties and uses of the article made, it may amount to invention. And substitution of materials may constitute invention, where it produces a new mode of operation, or results in a new function, or in the first practical success in the art in which the substitution is made. So also, where the excellence of the material substituted could not be known beforehand, and where practice shows its superiority to consist not only in greater cheapness and greater durability, but also in more efficient action; the substitution of a superior for an inferior material amounts to invention."

Within the rule thus laid down by both text-writers and courts, the Nielsen combination clearly displayed invention. Villy used sectional paper strips with foldable joints solely for the purpose of foldability, so that the strips might be folded up upon one another and packed away into a small space when not

in use, and expanded into bell shape when in use. He was not considering the problem of counter-vibrations in metallic horns. He was not dealing with metallic horns at all. His division of a paper horn into sectional strips was purely a question of construction, one of convenience in handling. On the other hand, Nielsen was dealing solely with metal horns, and his object was to counteract the vibrations incident to metal horns, but at the same time to retain the metal as proper material for the horn. This acoustical result he attained by dividing the one-piece metal horn into a multiplicity of longitudinal sections, then uniting them together at their edges by a seam which produced outside ribs, and tapering them in plan so as to produce a bell-shaped form. He was not aiming at a mere mechanical change, a change which would make a cheaper horn. On the contrary, his horn is much more expensive than the old onepiece metal horn. His inventive thought went far ahead of and beyond that. He desired to produce a horn which, regardless of the cost of manufacture, would obviate the defects of the prior metal horns while retaining their good qualities. His horn produced a "new and useful result, an increase of efficiency," as called for by the decision in Hicks vs. Kelsey. His horn also "developed new properties," produced "a new mode of operation," resulted in a "new function," and its superiority consists "not only in greater cheapness and greater durability, but also in more efficient action." The divisibility of a onepiece paper horn into sectional strips united by foldable joints by Villy would not suggest to a person skilled in the art the desirability of dividing a metal horn into longitudinal strips and uniting them together by outside ribs and curving them in plan to produce the bell shape. Paper horns did not possess either the good qualities or the bad qualities of a metal horn. They did not possess the metallic vibrations of the metal horns. Neither did they possess the resonant qualities of metal horns which it was desirable to preserve. Consequently, the division of a paper horn into a multiplicity of strips for the purpose of securing foldability would not suggest the division of metal horns into longitudinal strips for the purpose of counter-acting the metallic vibrations and preserving at the same time the desirable features of metal horns. The fundamental, basic idea of Nielsen was to so construct a metal horn as to preserve its resonant qualities and at the same time counteract its vibratory qualities. If this was not an inventive idea, then there never has been shown an inventive idea in the history of the patent law. The marvelous result which followed is proof of this conclusion. It met with adoption by the entire trade and its continuance and exclusive use, to the exclusion of all other horns, for years afterwards, during which the phonograph was brought to perfection, must be given appropriate

effect. In such cases, this court has said that these facts are sufficient evidence of invention.

But still further, Nielsen did not merely substitute one material for another. In dividing a metal horn into longitudinal sections, as he did, structural expedients were necessary, which were not necessary in dividing a paper horn into sections. Nielsen not only conceived the idea of dividing the one-piece metal horn into a multiplicity of longitudinal sections, but he also united them toegther by a joint which provided ribs on the outside and he curved the sections in plan so as to produce the bell shape. Villy used a foldable hinge or joint between his sections, and that result was obtained by pasting the paper strips on a backing of linen leaving a small longitudinal space between the edges of each pair of strips. In that way he secured the result that he was seeking for, to wit, a foldable and collapsible horn. Some mechanical adaptation, therefore, had to be exercised by Nielsen besides the mere substitution of materials. Mechanical changes had to be adopted. Now, it matters not how small, in a mechanical sense, those changes were. If any change at all was necessary in the substitution, that fact must be given effect in determining whether or not the person has done anything more than change the materials. Those mechanical changes of structure which Nielsen adopted add strength to the inventive idea, and we submit

that his horn shows the presence of the inventive faculty.

To recapitulate the situation regarding the Villy patent, we submit the following: Villy was not concerned with the problem of curing metallic vibrations; his efforts related solely to paper, wooden, and such like horns, in which there were no metallic vibrations; he had no thought to produce a better sound producing horn; his sole object was purely mechanical and structural and in no way acoustical, consisting in the production of a paper or wooden horn which would be foldable and collapsible, to the end that it might be folded or collapsed into a small compass and packed away when not in use; in attaining his end he divided a paper or wooden horn into longitudinal strips and pasted them on a background of linen, thereby producing a flexible joint between the edges of the strips, whereby the foldable feature was obtained; such a structure would not naturally and spontaneously and without the exercise of the inventive faculty suggest to a person the desirability of dividing a metal horn into similarly shaped sections for the purpose of counteracting metallic vibrations and thereby improving the sound producing qualities of the horn; the utmost that could be claimed would be that the Villy construction might suggest the desirability of dividing the metal horn into sections for the purpose of foldability; but even in that event additional adaptation and contrivance would be necessary

in the provision of a permanent rigid metal joint between the sections, and then the result obtained would be a rigid self-sustaining horn and not a collapsible one; Nielsen's change from paper and wood to metal and the provision by him of rigid metal joints with ribs on the outside produced a wholly different result from any that might be suggested from contemplation of the Villy structure in that Nielsen produced a horn capable of new functions and having new properties, which were not exhibited by any other horn of the prior art; the changes made by Nielsen were both acoustical and mechanical, and the combination of the two produced a wholly novel device. In a word, the problem solved by Villy was purely mechanical and structural, without any thought of scientific effect, while that of Nielsen was fundamentally scientific, supplemented incidentally by mechanical adjustment and contrivance to produce the scientific result.

Potts vs. Creger, 155 U. S., 608-9, is conclusive on this point, where it is said:

"Not only did they discard the glass bars and substitute others of steel, but they substituted them for a purpose wholly different from that for which they had been employed. Under such circumstances, we have repeatedly held that a change of material was invention."

CAREER OF PLAINTIFF AN ALLEGED FAILURE.

Under this head, at page 82 of his brief, counsel refers to the fact that the Searchlight Horn Co. was

obliged to abandon its business. The evidence shows, however, that the reason for abandoning it was that powerful infringers broke up that business by reason of their wide-spread manufacture and sale of infringing horns. It comes with ill grace from an infringer to allege that the patentee was not financially able to market his patented article, when it is apparent that such failure was due to widespread infringements.

SALE OF HORNS BY SHERMAN CLAY & COMPANY.

Under this heading, commencing at page 82 of the brief, counsel asserts that there is no proof that Sherman Clay & Company sold the horns which were charged to be an infringement. In that behalf he points out that in May, 1908, the Searchlight Horn Co. abandoned its business and made arrangements with the Standard Metal Mfg. Co. to manufacture horns on a royalty basis, and it is then asserted that the horns supplied to Sherman Clay & Co. by the Victor Talking Machine Co. were manufactured by the Standard Metal Mfg. Co., and that it does not appear that the infringing horns involved in this case were made by the Standard Metal Mfg. Co. subsequent to May, 1908. From this the court is asked to presume that the infringing horns were not procured prior to May, 1908.

This reverses the rule that every presumption is to be indulged in favor of the correctness of the judgment. If any presumption is to be indulged at all, it is that the horns in question, or some of them, were sold prior to May, 1908. In this connection it is to be noted that the bill of exceptions does not state that it contains all the evidence introduced at the trial, and it may be that there was other evidence of infringement on which to base the verdict.

But there is no need to indulge in any presumption in the matter at all, for the reason that there are abundant facts in the record on which to base a finding of infringement. It appears therefrom that Sherman Clay & Co. secured its infringing horns from the Victor Talking Machine Co., which last named company in turn procured some of them from the Standard Metal Mfg. Co. and some of them from the Tea Tray Co. Mr. McCarthy, an employee of Sherman Clay & Co., testified that for six years prior to May, 1911, Sherman Clay & Co. was engaged in selling these horns, and that the total number so sold during said period was approximately 7,456 (Record 93). This would place the beginning of the infringement as early as May, 1905. Consequently, Sherman Clay & Co. were infringing three years before the Searchlight Company turned over its business to the Standard Metal Co. Some of the 7,456 horns were sold during that period of time.

Another employee of the defendant, Albert A. Reed, testified that Sherman Clay & Co. had been engaged in selling the horns charged to be an infringement ever since the product had been on the market (Record

91), and the evidence shows that the product had been on the market since 1904. The testimony of these two witnesses is sufficient to show an infringement prior to the time when the Searchlight Co. made its arrangement with the Standard Metal Co., and inasmuch as the judgment is for the nominal amount of \$1.00, it was not necessary to show the exact number of horns sold prior to that time. It is sufficient that some of them were so sold.

But furthermore, there never was any arrangement between the Searchlight Horn Co. and the Standard Metal Mfg. Co. for a license for the manufacture and sale of the Nielsen patented horns. The only evidence on the subject is that of the witness Locke. His testimony shows that prior to 1908, his company was engaged in marketing certain folding horns, some of which were sold to Sherman Clay & Co. (Record, 81, 84). These folding horns were supposed to have some advantage over the standard Nielsen horn in that they could be folded up and shipped in smaller bulk. It appears that Locke tried to induce the Tea Tray Company, the Standard Metal Mfg. Co., and the Hawthorne Shieble Co. to combine together with him in the manufacture of those folding horns. In that effort he was unsuccessful, and he concludes by saying:

"In the meanwhile the manufacturers had adopted a horn and I found the business unprofitable, so I made an arrangement with the Standard Metal

Company of Newark, New Jersey, to take my machinery and fill whatever demands there were for those folding horns and pay me a royalty. I went out of the business as a manufacturer "That was in May, 1908" (Record 80-81).

The foregoing is all the evidence on the subject of the transfer of the business to the Standard Metal Co., and it appears clearly therefrom that the only thing transferred was the manufacture of the folding horns. There is not a scintilla of evidence in the record to show that the Searchlight Horn Co. transferred to the Standard Metal Co. the right to manufacture any other style of horn. Consequently, the infringing horns made by the Standard Metal Co. and supplied to the Victor Co. were not, as a matter of fact, and could not, as a matter of law, have been made under the agreement referred to.

But still further, there is no evidence in the record showing that all the infringing horns sold by Sherman Clay & Company were manufactured by the Standard Metal Co. The only evidence on the subject was obtained from the witness Locke. At the bottom of page 83 of the record, he says that the Standard Metal Mfg. Co. manufactured the bulk of the horns of the Edison Phonograph Co. and the Victor Talking Machine Co.

At page 85 he testifies that he understands that most of the horns of the Victor Co. are manfactured by the Standard Metal Co., but that the Tea Tray Co. made some of them.

At page 86 of the record, he was asked these questions by defendant's counsel:

"Q. The Tea Tray Manufacturing Company manufactures horns for the Victor Talking Machine Company?

"A. Both the Tea Tray Company and the Standard Metal Manufacturing Company, I be-

lieve.

"Q. Do you know that the Standard Metal Company manufactures horns for the Victor Talk-

ing Machine Company?

"A. That is my impression. I don't know actually anything about it. They did and I have no doubt that they do to-day."

At the bottom of page 87 and top of page 88 of his testimony, we find the following:

"Q. You have never brought suit against the Tea Tray Company or the Standard Metal Company?

"A. No, sir; not yet.

"Q. They are the parties that are doing the

actual manufacturing of these horns?

"A. I suppose so. Of course, I don't know. They manufacture them for the talking machine companies."

At the bottom of page 88 and top of page 89, we find the following:

"Q. The Standard Metal Company, as I understand from your testimony, manufactures horns for the Victor Talking Machine Company?

"A. As far as I know, sir. I am not the Stand-

ard Metal Manufacturing Company.

"Q. As far as your knowledge goes? "A. As far as my knowledge goes, yes."

It would appear from the foregoing testimony that both the Standard Metal Company and the Tea Tray Company manufactured horns for the Victor Company, though even that evidence is not satisfactory inasmuch as Mr. Locke was not connected with either of said companies and necessarily his testimony was of a hearsay character. But assuming the evidence sufficient to show that both the Standard Metal Company and the Tea Tray Company made horns for the Victor Company, it does not appear anywhere in the record by any evidence of any kind that the particular horns which were supplied to Sherman Clay & Company and sold by them on the Pacific Coast, were made by the Standard Metal Company. For all that appears they may have been made by the Tea Tray Company, in which event counsel's point would go for nought. It does not appear which of the two manufacturing companies manufactured these particular horns. It may be that some of the 7,456 horns in question were manufactured by one party and some by the other, or it may be that they were all manufactured by one party, or it may be that they were manufactured by some third party not mentioned in the record at all. Under these conditions the learned counsel gravely asks this court to indulge in two presumptions, (1) that all the 7,456 infringing horns were manufactured by the Standard Metal Mfg. Co., and (2) that they were all manufactured subsequent to May, 1908.

And still further, these presumptions are asked, not for the purpose of sustaining the judgment, but for the purpose of reversing it. Has the learned counsel forgotten the rule of law that error cannot be presumed, but must be affirmatively shown in order to secure a reversal, or that other rule of law that the judgment of a lower court is presumed to be correct? His contention in this behalf is preposterous; yet he devotes twelve pages of his brief to the subject (Brief, 82-93).

And still further, the point is not available because there is no exception in the record on which to base it. No instruction on the point appears to have been asked, and it is not available under the exception to the court's refusal to direct a verdict for defendant, because the bill of exceptions fails to state that it contains all the evidence adduced at the trial (U. S. vs. Copper Queen, 185 U. S., 498).

EXTENSIVE USE AS EVIDENCE OF INVENTION.

Beginning at page 76 of his brief, counsel discusses this matter, and insists that the instruction given to the jury on that subject was error. In reply thereto we repeat that the instruction given is the language used by this court in the case of *Morton* vs. *Llewellyn*, 164 Fed., 967, where the court cites a list of cases in support of the rule, two being from the Supreme

Court. The judge of the lower court merely followed that rule of law as laid down for his guidance by this court. Consequently, the criticism of the charge in that regard is a criticism of the decision of this court in the Morton case. Undoubtedly it is not true that in all cases extensive use is sufficient evidence of invention; but in a doubtful case it is sufficient evidence, unless perchance the defendant produces evidence to show that the extensive use was due to extraneous causes, such as superior business efforts, advertising, etc. No such facts were shown by the defendant below, nor could they be shown, because all the manufacturers in the art adopted the device. There is a distinction to be noted between extensive use by the patentee, or even one or two manufacturers, and extensive use by all the manufacturers in the art. Where all the manufacturers adopt a device, extensive use could not be attributed to such extraneous causes as are above suggested. But whatever may be the reason for extensive use in any particular case, this court has laid down the rule of law that in a doubtful case such use is sufficient evidence of invention, and with that we content ourselves.

ALLEGED LACHES OF PLAINTIFF.

Under this head it is asserted in the brief, beginning at page 93, that it appears from the record in the equity suit 2307, that the Victor Talking Machine Company was notified of the infringement in May, 1908, and that no suit was brought thereafter until the present one in May, 1911, and then the suit was brought on the Pacific Coast. From these facts it is urged that plaintiff was guilty of laches and bad faith. Barring the fact that counsel has to resort to the record in another case for the purpose of making his point, a record which was not even in existence at the time of the trial herein, and barring the further fact that this is not a suit against the Victor Company, the contention is so palpably unsound that we would be justified in ignoring it. We have already considered it in another place, and we merely add a word here.

How the doctrine of laches can be applied in an action of law, brought within the period of the statute of limitations, counsel has not informed us. We have always been under the impression that the doctrine of laches is applicable only in an equity suit. The present action is an action at law and was brought within the term of the statute of limitations, and there is no doctrine of laches to justify reversal of the judgment in an action at law so brought. That doctrine is purely an equitable one and not applicable to actions at law (Walker, Secs. 591, 596). In this connection counsel also repeats his often-made statement that suit should have been brought against the Victor Talking Machine Co. and that it is an evidence of bad faith to have brought this action against Sherman Clay & Co. on the Pacific Coast. We cannot bring ourselves to believe that counsel really places any confidence in such contention. It may be, however, that by his continual and frequent repetitions of the statement he will ultimately bring himself to believe it. The frequent reiteration of an untruth sometimes gives it a semblance of verity with unthinking people.

Along the same lines, at page 96 of the brief, it is asserted that unless the judgment is reversed and the defendant be allowed to introduce all its evidence, a very serious wrong and injustice will be done to a large number of people, and that it is therefore important that this court should give the defendant an opportunity to have its case retried. This is nothing more nor less than cheap declamation. If there are any reversible errors in the record, this court will reverse the judgment; if there are none such, this court will affirm the judgment. Let the counsel, therefore, point out his reversible errors. To prate generally about hardship and injustice of a verdict, without pointing out any reversible error, is an improper course to pursue when arguing before an appellate court.

A CLERICAL ERROR.

At page 110 of his brief, counsel calls attention to what he denominates a clear error of the court in the charge to the jury, where it is said:

"The metal strips constituting the defendant's horn are secured together by a seam or joint known as a flange or butt seam." On referring to the record at page 276, we find that the word "defendant's" is there used. The whole sentence there appearing reads as follows:

"That is to say, the defendant contends that even if the Nielsen patent is valid, the defendant has not infringed upon any of its claims, and in that behalf it is pointed out and relied upon by the defendant that the metal strips constituting the defendant's horn are secured together by a seam or joint known as a flanged or butt seam."

We have examined the original charge of the court as given to the jury and taken down by the official stenographer, a copy of which was furnished to us and is now in our possession. It appears from said original that the clause under discussion has not been correctly copied into the bill of exceptions. In the original charge the sentence reads as follows:

"That is to say the defendant contends that even if the Nielsen patent is valid, the defendant has not infringed upon any of its claims, and in that behalf it is pointed out and relied upon by the defendant that the metal strips constituting the defendant's horn are secured together by a seam or joint known as a lock seam, whereas it is claimed by the defendant that the Nielsen patent does not disclose such a lock seam but discloses only a seam or joint known as a flanged or butt seam."

We have italicized in the above quotation from the original charge the words which have been left out of the charge appearing in the bill of exceptions at page 276 of the record.

It was the duty of the plaintiff in error's counsel to correctly copy the charge into the bill of exceptions, and we assumed that this duty had been fulfilled until the above mentioned error was pointed out in the opposing brief. It is plain that a clerical error has been committed in this connection, doubtless due to carelessness of the copyist. Opposing counsel will agree with us in this statement. He doubtless has in his possession a correct copy of the court's charge, from which he can see that the aforesaid clerical error has been committed. If the court thinks the matter of sufficient importance, we will ask for the issuance of a writ of certiorari for a diminution of the record; but we scarcely think such is necessary. Not only will opposing counsel admit the clerical error, we believe, but it is clearly apparent from the context that a clerical error has been made, and that the lower court never intended to instruct the jury that the defendant's horn used a butt seam, but intended that language to apply to plaintiff's horn. We do not criticise counsel for having committed a clerical error, because such errors frequently happen in practice, but we cannot approve the effort to take advantage of this clerical error.

In conclusion we earnestly insist that the Nielsen invention is a meritorious one as distinguished from a mere trivial improvement. Consequently, it is entitled to liberal construction. In such cases the courts look

with favor on the patent with a view to upholding rather than destroying it.

Respectfully submitted.

JOHN H. MILLER, WM. K. WHITE, For Defendant in Error.